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THE AMERICAN PSYCHOLOGIST

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ROLES FOR PSYCHOLOGISTS IN THE "MAINTENANCE OF PEACE"

ROGER W. RUSSELL¹

Indiana University

IN 1958 the Board of Directors of the American Psychological Association authorized the Executive Secretary to call together

a small group of experts to consider any appropriate program which should be recommended to the Board regarding the role of psychologists in the maintenance of peace (Carter, 1958, p. 699).

This action was a result of expressions of concern that psychologists and their association had not considered with sufficient thoroughness contributions they might make to problems of national and international security having important components of human behavior.

The present study has gone considerably beyond the calling together of a small group of experts. Indeed it would be difficult to find any psychologist who would call himself "expert" on an issue as broad as "maintenance of peace"; "interest in" and "expert on" such an issue are not necessarily synonymous. A previous survey (Russell, 1958) had provided a list of psychologists who had such interest in the issue as to correspond at length about it. To this list were added the names of psychologists who had either published papers or had participated in public discussions relating to the general issue. All these persons were sent a letter requesting their attitudes and ideas on contributions psychologists and APA might make to the "maintenance of peace." The letter was deliberately "open ended," for it was already clear that this wide and nebulous topic could be interpreted in many different ways. Replies to this letter provided a variety of leads, which could then be followed up by (a) more specific inquiries, (b) discussions with individuals and groups having particular interest, (c) search for relevant literature from psychological and other sources, and (d) finally, by the meeting as originally planned.

Roles for psychologists, or for any other scientific and professional group, in the "maintenance of peace" is not an uncomplicated issue to handle—some psychologists were frankly skeptical as to

whether the present study should be undertaken at all. There is reason to believe that much of the uncertainty about contributions psychologists do and may make arises from the wide variety of possible interpretations of the term "maintenance of peace." Some of these interpretations—e.g., those involving ideologies, value judgments—raise considerations in which psychologists may be interested as citizens, but about which they may have no "special competences" as psychologists. Although the import of such interpretations is fully recognized, it is believed that the purposes of the present study are more adequately served by examining the roles psychologists do or may play in the maintenance of peace *as it is presently practiced*. This approach does not place limitations on inventiveness; for examination of behavioral components of current practices may well lead to the increased effectiveness of some, the discarding of others, or the development of new and worthy concepts. The present approach does at least make it possible to come to grips with the general issue.

It will be obvious that this study is not the result of any one person's efforts: many psychologists and some nonpsychologists have participated in one way or another. Those aspects of the report of which a reader does not approve should be attributed to the author; those which are useful are the contributions of many collaborators. I would like to express particular appreciation to the following, who participated in the final meeting and at other stages of the study:

Michael Amrine, APA Central Office
John L. Finan, HumRRO, George Washington University
Paul M. Fitts, University of Michigan
Harold Guetzkow, Northwestern University
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M. Brewster Smith, University of California
Ellis Weitzman, American University

¹ EDITOR'S NOTE. This report was prepared while Roger W. Russell was Executive Secretary of the American Psychological Association.

OPINIONS CONCERNING THE GENERAL ISSUE

In the course of surveying "Contemporary Issues of Concern to Psychologists" (Russell, 1958), it became very apparent that a considerable number of psychologists, representing all areas of specialization, were deeply interested in contributions they or their discipline might make to the "maintenance of peace." This interest was not new: psychologists as individuals and at least one division of APA had been engaged in serious consideration of the issue for a number of years. Psychologists have expressed concern that many of these earlier efforts failed to achieve the effects anticipated.

We can't be particularly proud of our more grandiose pronouncements of the years during and immediately after the war.²

When stated in these general terms, "maintenance of peace" is so vast an issue as to encourage psychologists—despite their very real concern as individual citizens—to

withdraw from the fray to cultivate our scientific and professional gardens.

psychologists will have little effect when they write and talk about peace and war in the abstract.

Psychologists have expressed their strong belief that useful contributions of psychology to the "maintenance of peace" depend upon a thorough and realistic analysis of the implications of the phrase at the level of individual and social behavior. They are concerned with the

rigid freezing about the magnitude of the problem, which inhibits inventive responses at the more differential level where our contribution is sure to lie if it lies anywhere.

The rapidity with which significant events now occur has the unfortunate effect of further undermining the objectives. Even the question of whether psychologists have any special competences in this most important area of national and international concern cannot be answered until "maintenance of peace" has been defined. Characteristically psychologists have expressed the opinion that one of the most important initial steps is to determine what it is

that psychologists have to contribute that is different from the intelligent public official and the specialist in some other discipline.

² Quotations indented in this manner are taken from statements submitted by psychologists during the preparation of the present report.

approaches to great problems, such as peace or education, must be made in as concrete terms as possible.

it might almost be better not to speak in terms of the maintenance of peace, but rather in terms of specific contributions which psychologists could make.

They are concerned that

we could promise too much, in effect if not in intent . . . we should keep our promises modest . . .

and they clearly accept the fact that

the problems raised certainly go considerably beyond the range of competence of psychologists . . .

Although cautious in their approach to the "grand topic," psychologists representing all areas of specialization have expressed the belief that their discipline does have some contribution to make.

I imagine I have much the same faith that you do that psychologists have methods and techniques, sophistication about relevant variables, and some limited secure knowledge that ought to be relevant to specific, limited, but important facets of the maintenance of peace.

I am sure there are at least minor ways in which we might be helpful.

psychologists may be able to make an effective contribution if more specific and clearly defined facets of the general problem are identified.

Opinions differ as to the extent to which current psychological knowledge and methodology can be soundly put to immediate work. Some have already wrestled with the psychological implications of "maintenance of peace" and are engaged in constructing and testing hypotheses relevant to limited aspects of these implications. Others are attempting to compile information already available and to present it in a form which may be useful to those public officials who are responsible for national and international actions affecting "peace." Still others are applying psychological knowledge and techniques to the training of such public officials and to the accumulation of information important to their work.

Opinions expressed on the possible contributions of psychologists to the maintenance of peace were not, as some expected they would be, those of

people much more motivated by an ideological issue than by science.

Typically they were opinions which accepted the significance of the issue, urged thoroughness in defining it, and expressed caution in coming to grips with it.

The following sections of this report have been prepared with these opinions in mind. They are concerned first with defining "maintenance of peace" in terms of current practices; then with ways in which psychologists do or may contribute; and, finally, with suggestions of ways in which APA can facilitate their contributions.

CURRENT PRACTICES IN "MAINTENANCE OF PEACE"

APA's concern with the part psychologists can play in the "maintenance of peace" arises, of course, from some obdurate contemporary realities: among them are the cold war, the threat of atomic war, the challenges to democratic values, and the generally precarious position of the United States in the world. These realities pose acute conflicts of values for psychologists, policy makers, and other thoughtful citizens. In the cold war with its vicious cycles, what priority can or should be given to action toward the long-run reduction of conflict, as compared, for example, with action toward the short- or longer-run advancement of the United States national interests as such? Are there ways of promoting peace in the long run with minimal jeopardy of national interest in the short run? How are risks to the "maintenance of peace" to be weighed against risks to national interest in inherently risky decisions?

These and related dilemmas can be viewed as legitimate topics for objective psychological analysis and research. Where the values of peace and of immediate national interest can be seen to coincide, the application of psychological research and knowledge presents no value conflict to psychologists. Where, as is more characteristic, the value issues are more complex, the APA cannot appropriately assume or create consensus that does not presently exist. But an awareness of these and related dilemmas presented by contemporary reality is essential to perspective on the current activities of psychologists as here reviewed. Without APA initiative, the demand for help from psychologists has tended to come from echelons of government concerned more with the short run than with the long run, more with the cold-war one-upmanship than with a broader context that includes the possibility of conflict reduction. Our array of present activities may therefore give a biased representation of roles psychologists might play toward the maintenance of peace.

A step toward realistic definition is to examine current practices in the "maintenance of peace." These are practices which are likely to continue in use for a long time; future developments may lead to change, but any definition of "maintenance of peace" that ignores the present reality of current practices and their probable continuance is wool-gathering. For purposes of the present report, descriptions of the practices are necessarily brief and, therefore, sketchy—this is not a treatise on cold war strategies. It must be emphasized that the descriptions are intended to provide a rough "operational" definition of "maintenance of peace" upon which realistic judgments may be made concerning potential contributions by psychologists and by APA; it is also important to state that there is no intention here to present value judgments concerning any of the practices discussed.

"Peace" is usually defined as "a state of tranquility or quiet," especially "freedom from civil disturbance or war." Practices today place their emphasis on the latter element of this definition and may even entertain "limited war" as a last ditch step in "maintaining peace" by averting "all-out war." The term "maintenance of peace" has thus come to include practices ranging from international cooperation in attempts at the solution of conflicting interests to types of warfare which range in violence from a low extreme of guerrilla warfare to limited war with limited objectives. Because disparate practices are employed concurrently, the choice facing nations today is not between absolute safety and grave risk of all-out war, but between degrees of risk.

Underlying these practices is the circumstance that intergroup tensions and conflicts continue to threaten the "state of tranquility." The practices themselves seek to deal with *effects* of these conflicts by means short of violence or, at least, short of all-out war—regardless of whether adequate solutions of the basic conflicts may in fact be achievable. The practices are means of producing change in existing equilibria. In the foreseeable future, it seems only realistic

to assume that conflict will be the pervasive intercultural or international condition and that attempts should be directed toward studying ways and means of reducing conflict to some more manageable and acceptable form short of killing.

International cooperation has long been a controversial concept. To achieve a lasting conflict

solution requires that the practice of international cooperation provide a means of integrating the needs of both sides to the dispute by finding a shared objective acceptable to the majority members of both groups or a common course of action which satisfies their different objectives.

Even today the basic assumption that mutual efforts can provide lasting *solutions* to existing conflicts and prevent the development of new tensions is challenged by some, although the isolationist movement of pre-World War II appears to have lost its main strength. The recognized policy of the United States is that national security is bound up with the security of peoples everywhere. Today the main criticism of international cooperation seems to center around the particular techniques employed, which, in general, do not appear to have served the purpose of producing solutions. For example, the regional security arrangements into which the United States has entered—a type of limited international cooperation—may have served the purpose at least temporarily, but they have also been a source of increased tension between the regional nations included in the arrangements and the nations excluded.

The current climate of criticism of techniques for international cooperation are leading some to reject the validity of this whole approach to the "maintenance of peace." Others, concerned that no reasonable substitute is available, are examining old techniques and searching for new. For example, the American Bar Association has been devoting considerable effort to studying techniques for international cooperation based upon an acceptable system of international law. Other groups are examining the implications of various forms of world government. Psychologists and other social scientists are turning their attention not only to techniques for resolving conflicts, but also to the underlying conditions critical to the development of conflicts and the "natural history" of conflicts once they have arisen.

Compromise is currently the most common technique for adjusting conflicts of interests. The practice requires that the parties to a dispute modify their objectives so that they can agree upon a *modus operandi*. Compromise is typically arrived at by negotiation and bargaining. History has seen compromise achieved in negotiations dependent upon positions ranging from military and economic strength to appeasement. Unless compromise leads

to modifications of objectives which are acceptable to the parties involved, it does not lead to a lasting "solution" of the basic conflict; the conflict may then reappear at a later time or in another guise. Psychologists and other social scientists have shown an increasing interest in compromise as a practice, including characteristics of participants and of group interactions which affect the process, critical prenegotiation conditions, and effects of compromise decisions on members of groups affected.

Arms regulation is a practice based upon the rationale that manifest conflicts of a violent nature may be minimized or prevented by removing the means of violence. The ultimate goal of this practice is "total disarmament," although it includes "arms limitation" or "partial arms reduction" and elimination of particular weapons systems, e.g., nuclear, biological, chemical warfare.

An example may be useful here as an illustration of attempts to put this practice into effect. Agreements concerning arms regulation are reached by the process of negotiation. In 1946, the United Nations began negotiations affecting atomic energy only. In 1947, the United Nations Atomic Energy Commission approved a plan for the international control of atomic energy, but agreement was not reached on the timing to put the plan into effect. In 1952, a Disarmament Commission was created, but little attention was given to the atomic control problem. In 1955, President Eisenhower appointed a Special Assistant for Disarmament; United States policy was reviewed, and the "open skies" proposal followed. In the spring of 1957, the proposal was still being discussed and expanded at the London Conference. In February 1958, the President's Special Assistant resigned and was not replaced. Negotiations are continuing now at the level of inspection systems to ensure that any arms regulation agreement reached may be effectively enforced or warning of a violation given in time for effective countermeasures.

Underlying this extended period of as yet unsuccessful discussion are many problems of interest to psychologists and other social scientists: characteristics of the negotiation process; attitudes of the nations represented; status of research and development in the general area of atomic energy in nations participating; political, social, and economic considerations.

Persuasion is used here to include the many specific techniques employed to alter the attitudes and

objectives of other groups; it is in this sense an aggressive, although nonviolent, as well as a defensive practice. It is based upon the rationale that conflicts may be resolved or minimized by inducing groups to change their attitudes or objectives to conform more closely with those of the persuader. Techniques of persuasion are used not only to influence other groups, but also to alter attitudes and objectives at home. Persuasion may, as several recent examples have shown, lead eventually to "take-over" by subversion and *coup d'état*. It may also produce serious conflicts between a group's motives in attempts to influence others and the adverse effects produced by the attempts—the adverse effects of certain economic embargoes in the past are illustrations of this conflict.

Deterrent power is an age-old practice for the "maintenance of peace." It has been a consideration in this nation's policy since President Washington, in 1790, stated to Congress that "to be prepared for war is one of the most effective means of preserving peace." Traditionally the practice has been based upon the rationale that, by maintaining a posture of sufficient military strength, it will be unnecessary to use it; because all can see its potential, it can remain safely leashed. More recently it has been recognized that deterrent power in its broadest sense includes economic capability: capability to withstand persuasion and, if necessary, military attack; and, in the days of Sputnik diplomacy, even educational and intellectual capabilities leading to new achievements in research and development. Today many people regard the deterrent strategies of the "great" nations as the chief sanction against the would-be user of thermonuclear and other highly destructive weapons systems. The practice of deterrent strategies places heavy demands upon a nation's manpower, economy, social and political structure, and its capabilities for research and development. It is also true that, in fact, deterrent power frequently does not deter (Milburn, 1959).

It is also clear that deterrent strategies include the risks of "limited war." War for limited objectives has, in modern times, been the rule rather than the exception; since World War II and during the present period of atomic deterrent strategies, there have been, in addition to the Korean conflict, some 14 instances of so-called small-scale conventional aggression in the world. Perhaps the greatest danger of all-out war today is from a limited war

getting out of control. This risk has led to limited war doctrine which includes such complicated issues as persuading an enemy that operations are in keeping with a limited objective and the willingness to settle for a limited defeat or the frustration of an objective (United States Department of the Army, 1958).

All these practices involve psychological issues which are not clearly defined and about which psychologists have relatively little knowledge.

CONTRIBUTIONS BY PSYCHOLOGISTS

The brief survey of current practices for the "maintenance of peace" points up a number of specific facets of the general issue which should be amenable to psychological study. Indeed, it would appear that: there is a very considerable amount of relevant information already available in the psychological literature; there are psychologists who are currently engaged in analyzing various aspects of the general issue with the objective of developing hypotheses and research techniques for testing them; and there are instances in which psychologists, frequently in collaboration with other behavioral scientists, are applying present knowledge and techniques.

It would not serve the purposes of this report to attempt a survey of all the relevant literature nor to describe all the specific contributions psychologists might make. Instead, the approach will be to present general categories of actions open to psychologists. The categories are familiar ones; for, although many aspects of the present issue may appear particularly elusive, psychologists have taken similar action in coming to grips with other general issues in the past.

Search for Psychological Components

"Maintenance of peace" includes a variety of components, many of which are not directly psychological in nature.

it is clearly an oversimplification to say that wars are born in the minds of men, and it is further a *non sequitur* to conclude that the ways of peace must be similarly psychological . . . power conflicts are more fundamental than mere misunderstanding . . . political and economic and historical factors play a major part . . .

It is very possible that one reason for the reluctance of psychologists to consider the general issue and the very limited successes they have had in handling

it lie in the lack of a more thorough and complete analysis of "maintenance of peace" for its *psychological* components.

In "Contemporary Issues of Concern to Psychologists" (Russell, 1958, pp. 213-214) the suggestion was made to

bring together the best minds we have in the disciplines concerned with human behavior, plus some interested persons from other disciplines to:

1. Formulate the best possible statements about anticipated trends in national and international affairs during, say, the next ten years
2. Set down inferences from these statements which would serve to define basic problems that may be susceptible to solution by persons trained in research on human behavior
3. Examine present knowledge which could be applied to the solution of these problems
4. Suggest an order of priority for further research which deserves special encouragement

Two of the major features of this suggestion are: (a) a broad frame of reference which would encourage a comprehensive approach to all aspects of the issue and (b) the inclusion of behavioral sciences other than psychology. Such a project may be too ambitious at present, although the desirability of considering it seriously has been raised by several persons during the course of the present study. An alternative and perhaps more manageable possibility, which would not lose sight of the major feature of a comprehensive approach, would be to limit the project, at least initially, to psychologists.

Analyses of particular facets of the general issue have already been made by individual psychologists and by groups of behavioral scientists which have included psychologists; other analyses are in progress. Two examples illustrate this approach:

1. During recent years steps have been taken at the Institute for Social Research in Oslo, Norway, "toward an International Program of Research on the Handling of Conflicts." The program has involved collaboration between Norwegian and American behavioral scientists and is

conceived of as a *long-term commitment* . . . consistently concerned with the development of a common framework of concepts and hypotheses, whatever the heterogeneity of the empirical studies to be included" (Rinde & Rokkan, 1959, p. 5).

Already the program has produced a theoretical analysis of decisional conflicts (Janis, 1959) and of the meanings of nonviolence (Sharp, 1959), an analysis of pacifism based upon sociological con-

cepts and theories, and statements of research problems and hypotheses concerning the reduction of intergroup hostility (Janis & Katz, 1959; Katz, 1959). These analyses have reached the point where specific research studies may be designed to test some of the assumptions underlying non-violent approaches to "maintenance of peace." They also have clarified some of the problems of research strategy in the general area of intergroup conflict.

2. Analyses of the requirements of military systems and practices basic to implementation of the concept of deterrent power have identified problem areas in which human factors are of primary importance. Once identified, such problems are susceptible to research and to the development and application of solutions.

This category of action for psychologists involves the systematic, rational processes of analyzing "maintenance of peace" so as to identify basic issues which may be subjected to careful study. It is the stage of "defining the problem" which must precede attempts to seek solutions. With such definition will come hypotheses which can be put to the tests of well-designed research.

Summarizing and Integrating Current Information

In the opinions of many psychologists there are very useful contributions to be made through the compiling and integrating of information which is already available and immediately relevant to psychological aspects of the "maintenance of peace."

One obvious activity for psychologists is to summarize and integrate materials which might be considered a psychology of international relations . . . I am sure that there are psychologists who would be able to do this and be interested in doing so if they were given financial and other support.

Consolidating such information could be a particularly important first step toward putting it to use, and consolidation could be helpful in providing background for further research and for the development of new ideas.

A frequent comment by nonpsychologists is that, despite a general belief that psychology should have something to offer them, there is little from psychology that is readily accessible in terms which they can understand and put to use. The engineer, for example, may be interested in applying information on human factors relevant to the weapons system upon which he is working, but only very recently has he begun to receive this information

in a form which is useful for his purposes. More and more often psychologists are being asked for information on the measurement of and methods for changing attitudes; the organization of groups for maximum functional efficiency; the nature of decision making, of negotiation and bargaining, of personality factors in leadership; and even for answers to the general question of what psychology may be able to contribute to the nation's present and future efforts at "maintaining the peace." By compiling and integrating information, psychology can prepare itself to communicate useful information to nonpsychologists; at the same time, the process of compiling and integrating would be excellent preparation for psychologists who could then serve as advisors. Opportunities to serve in these capacities have arisen on a number of occasions during the last three years; fuller advantage could be taken of the opportunities if it were possible to refer quickly and conveniently to summaries of relevant psychological information and to knowledgeable persons.

The years since World War I have seen the appearance of a number of summaries of information relevant to psychological aspects of the "maintenance of peace." These summaries reflect an increasing amount of research. In this way they are proving to be useful contributions, deserving attention and support. An example of current effort is the plan by APA's Division 9—The Society for the Psychological Study of Social Issues for a volume on *International Behavior: A Social Psychological Interpretation* to include reviews of such topics as: international attitudes, effects of communication media, effects of international contacts, resolution of international conflicts, decision making processes in international affairs, and negotiation and bargaining. These are all topics upon which considerable research information is now available. Summaries of this kind have tended to be written for readers having some sophistication in the behavioral sciences. It is to be hoped that, when sufficient facts are known, they will be summarized in terms which are more appropriate to those immediately involved in international relations but are not necessarily behavioral scientists.

Research

Because of the present status of our knowledge of psychological factors in "maintenance of peace," psychologists are likely to feel most at home when devoting their energies to research. Within the

present definition of the general issue, there is a very considerable amount of research already in progress. Many investigations will result in knowledge contributing to the advancement of psychology as a science: they have been designed to study basic psychological processes. Other investigations are oriented more toward the development and application of current knowledge and techniques.

The problem here is to turn the research attention of psychologists to finding out things that will contribute to maintaining the peace, just as NIMH is now trying to turn their attention to solving problems of delinquency, alcoholism, schizophrenia, and the like.

Examples given earlier suggest that identification of basic psychological aspects of the "maintenance of peace" are providing hypotheses which may be put to test by carefully designed research studies. A recent suggestion for a systematic approach (Janis & Katz, 1959) will serve to illustrate the direction this thinking is taking; it has been made in considering means of coming to grips with psychological issues in a particularly difficult area for study: resolution of intergroup conflicts. The suggestion is for a three-phased approach, in which overlap in the timing of the phases is encouraged. The first phase would use existing documentary evidence from comparative case studies of historical instances along with primary-source data drawn from interview and questionnaire studies to identify more precisely significant variables and their relationships. Phase 2 would "consist of field studies of current and developing instances of social and political struggles in which the given action policies are and are not being employed"; as in Phase 1, the results could contribute both to the preliminary testing and to the reformulation of hypotheses. Phase 3, the experimental phase, would include field and laboratory experiments: the former involving the use of controlled experimental techniques for testing hypotheses about events occurring in natural settings; and the latter, the type of investigation currently used in research on group dynamics. The general rationale of this approach is familiar to research scientists; the fact that it can be applied to the study of some of the more elusive psychological issues in the "maintenance of peace" is the reason for describing it here. Skill and ingenuity are making such issues researchable and, thus, fair game for psychologists in the development of their science. The establishment of special research programs, such as those at the Institute for Social Research in Oslo, at the Center

for Research on Conflict Resolution of the University of Michigan, and at the Social Science Institute of Washington University, St. Louis, indicates the intentions of psychologists and other social scientists to take full advantage of this systematic approach.

Returning to the earlier definition of the general issue in terms of current practices, it is clear that psychological research in a wide variety of traditional as well as new fields has relevance to the "maintenance of peace." Indeed it is almost too easy to overextend the definition to the point where psychological research on the "maintenance of peace" almost completely overlaps research in psychology. This is hardly a useful point of view except when it suggests what may indeed be a fact: psychologists interested in contributing to various facets of "the maintenance of peace" can draw important information from many fields of psychological research—indeed from other fields—and, in their own research, can add to the development of psychology as a science.

No attempt will be made here to inventory the many specific areas of psychological research which could produce findings that might contribute to the "maintenance of peace." They have already been reviewed in a number of places (e.g., Kelman, Barth, & Hefner, 1955; Klineberg, 1950; Pear, 1950). Regardless of the specialization of the reviewer—social psychologist, military psychologist, etc.—these reviews have much in common. Specific research topics suggested by the psychologists contributing to the present study as having particular relevance are included in these earlier reviews. These are topics which are researchable with current psychological methods or which, psychologists believe, will be researchable with new techniques being developed. Some already have extensive research bibliographies.

Application of Current Knowledge and Skills

In addition to their capabilities in seeking new information through research,

psychologists already have methods and techniques, sophistication about relevant variables, and some limited secure knowledge that ought to be relevant to specific, limited, but important facets of the maintenance of peace.

The application of psychological knowledge and skills in some of the current practices for the "maintenance of peace" is under way; potential application in other practices either has not been

explored adequately or is not as yet accepted by those in charge.

Psychologists are already playing a large role in applied communication research, at least three aspects of which may prove vital in the "maintenance of peace": (a) elite communication (between political, military, economic, scientific leaders, etc.); (b) mass communication, including public opinion and attitude research; (c) vertical communication (e.g., communication of psychological scientists upwards to political and other policy-making and policy-implementing groups, and downwards to the general public). The expansion and the qualitative improvement of all these kinds of research might well mean reduction of war risks and the firmer establishment of a clear perspective on what it takes to maintain peace.

The psychologist's technological knowledge and skills have broad applications in the military establishment. Modern military establishments, in recognizing the real objectives of deterrent power, state their missions as the "maintenance of peace." They have begun to search for means of determining whether or not a particular kind of deterrent action, e.g., bases abroad, really does deter (Milburn, 1959). Here psychologists may be able to apply their skills to study the effects of deterrent actions on the reactions of other groups and from this and other information to predict the probable effects of future actions.

Industrial psychology is another example of the accepted application of technological knowledge and skills to the achievement of objectives, many of which are basic to economic stability which in turn influences all practices in the "maintenance of peace." Like military psychology, industrial psychology is defined by contexts of application: human performance underlies industrial operations. The design, control, and maintenance of even the most automatic industrial processes require human ingenuity and skill. All industrial operations involve the collaborative efforts of and communication between social groups: workers and management. Effective decision making has become an ever more important requirement. Industrial conflicts and factional disputes, despite their more limited contexts, resemble international conflicts. The culture patterns of industrial societies outside the workplace significantly affect productivity and the introduction of technological changes. Psychologists have brought their knowledge and skills to bear on these—and many other—aspects of in-

dustrial productivity. By so doing, they contribute to the economic facets involved in the "maintenance of peace."

The possibility that government agencies can make even fuller use of psychological information and skills than they do at present deserves careful exploration.

Psychologists for quite some time will be most effective in this large area when they work on specific problems for which they are equipped within the various agencies of the government and the United Nations.

By working with people responsible for the nation's policies and practices in "maintenance of peace," psychologists could have the opportunity of learning to understand the complex problems sufficiently well to do a responsible job of relating psychological knowledge to these problems.

The time is right for the government to begin to utilize the contributions of psychologists on a pilot study basis in many less crucial situations so that we can build up the "know how" which can be more confidently applied to larger and more crucial issues.

We need an undertaking which would put a group of psychologists (with wide experience in psychology and with great ability) at the job full time.

It is a very reasonable assumption that the "maintenance of peace" is determined to some degree by the knowledge, skills, and attitudes of those participating in international programs.

Concern with the maintenance of peace amounts to concern with the actions of the agents of our government—and through them with the actions of agents of other governments.

Important to the success of these agents is their knowledge of social interactions in the situations in which they function, their skills in handling human relations, and their attitudes toward differences in culture patterns.

Psychologists . . . can make useful contributions in the training of persons in various national and international organizations concerned with maintenance of peace.

A current example of how psychologists, and their colleagues from other social sciences, can contribute in this way is the Military Assistance Institute operated by the American Institute for Research for the Department of Defense. The MAI provides a program of instruction for United States military personnel about to go on duty with the military assistance program established by the Mutual Security Act of 1954. The instruction in-

cludes intensive study of the historical, political, economic, and cultural aspects of the particular area to which each person is assigned; it considers issues of public relations and personal interactions within the social setting of the particular area; it provides practice and discussion in a situation where criticism is available.

Underlying current practices of international cooperation, persuasion, and deterrent power in the "maintenance of peace" are educational, economic, and military assistance programs for nations abroad.

Recent action by the Congress and by the President of the United States and other events in the history of international education indicate a growing belief that education can be used effectively as an instrument for the promotion of international understanding and the maintenance of peace. This old and persistent dream of educators in many parts of the world has been taken up as an instrument of foreign policy by a number of countries (Quattlebaum, 1959).

Psychologists have participated actively in the educational programs as teaching or research scholars in foreign universities, as advisors in the administration of the programs, and less frequently as advisors on matters of policy; their participation in economic and military assistance programs has been more limited. What is perhaps their greatest potential contribution is still to be fully realized: evaluation research. Here, impact studies at home and in countries abroad could help to determine the effectiveness of programs designed to contribute to the "maintenance of peace" and to the achievement of specific goals in international affairs.

Another potentially important application of psychological knowledge and techniques which has not been fully exploited is to the area of "psychological intelligence" and public opinion.

Psychologists ought to be able to bring into the thinking of public workers more of a realization that what influences the thinking, feeling, and behaving of ourselves and others is not the objective realities as such, but our perception or representation of these objective realities . . .

General information about particular peoples, their values, national character, social structure, and attitudes toward issues affecting international relations can be of great value to all current practices in the "maintenance of peace." Psychologists, in collaboration with other social scientists, have the technical know-how to obtain such information. A continuing assessment of public opinion in other countries could produce information which, if put

to use, might avert the costly errors of *The Ugly American* (Lederer & Burdick, 1958). The program of the Institute of International Social Research and the area studies undertaken by UNESCO are examples of current efforts by psychologists and other social scientists to put their technical skills to work in obtaining information of value to "international understanding."

Psychologists might also make useful contributions at certain stages of the national legislative processes when there could be

value in having a psychological point of view present in longer range planning and policy making.

At least one other national organization in the social sciences has found a means of studying, on a small scale, the potential values of such contributions.

Collaboration with Other Interested Disciplines

It is apparent that there are aspects of the "maintenance of peace" which, though closely related to psychological interests, fall outside the scope of the psychologist's special capabilities; there are other aspects which involve interactions between psychological variables and variables from other fields. These are within the competences of other scientific and professional groups. Therefore, collaboration in attacks on issues of joint concern is desirable—indeed is already in practice.

psychologists could propose some joint efforts with sociologists and political scientists, particularly in efforts to understand those individual, group, and international dynamics which are relevant to the arousal and maintenance of conflict.

work with political scientists, people in the field of international organization, people in the field of international economic affairs, etc.

By defining "maintenance of peace" in terms of current practices, it has been possible to review the kinds of contributions psychologists are making and to suggest some facets of the general issue to which the special competences of psychologists might be more fully applied.

CONTRIBUTIONS BY APA

If psychologists are really serious in their concern over the general issue, there are ways in which APA, as their national organization, can encourage and facilitate their contributions to the "maintenance of peace." APA could play a supporting role to individual psychologists; it could provide opportunities for group efforts among its members; it

could establish and maintain communication channels between itself—and thereby its members—and other national and international, scientific and professional, government and nongovernment groups concerned with the "maintenance of peace"; and it could make some unique contributions of its own, which can be achieved more readily by a national organization of psychologist-citizens than by individual psychologists. The paragraphs which follow suggest extensions of present APA programs and the creation of a new program in national and international affairs; the suggestions include consideration of how the new program could be administered and coordinated. It is believed that these suggestions could be implemented now, without infringing in any way upon APA's customs and practices. The implementation would indicate the concern of American psychologists as a national group with the "maintenance of peace" and their interest in contributing their special competences wherever these competences may be of value.

From the standpoint of the potential contribution of psychology and of psychologists, and from that of the proper social responsibility of our Association, it is highly desirable that the APA take initiative.

The following suggestions are made knowing full well that many "roadblocks" will be encountered in attempts to implement them; APA should be alert to such barriers and to means of overcoming them.

Extensions of Present APA Programs

The following suggestions include only some of the possible extensions of present programs, those extensions which are most obvious at this early stage in considering APA's potential contribution.

International relations in psychology. In their report for 1956-57, which was accepted by the APA Council of Representatives, the APA Committee on International Relations in Psychology expressed a unanimous opinion "that it is important at this time for APA to support a strong program of international relations in psychology." This opinion was based upon the belief that the objects of the association—"to advance psychology as a science, as a profession and as a means of promoting human welfare"—can be served significantly by closer relations with psychologists abroad and by fuller acquaintance with their interests, methods, and accomplishments. This committee report specified some of the desirable features of an APA pro-

gram of international relations including: cooperating with psychologists of other countries in scientific and professional matters, participating officially in international meetings, establishing and maintaining contacts with psychologists and psychological societies abroad, assisting foreign psychologists during visits to this country and following up these contacts when the psychologists have returned to their own countries, expanding the coverage of international news in the *American Psychologist*, and maintaining close contact with the National Research Council Committee on International Relations in Psychology. A number of specific actions have been taken to implement this general program, but much more can be done. To realize its full potential, the program must be closely supervised by an active Committee on International Relations in Psychology, which is alert to new ideas and added opportunities, and supported by the facilities of the APA Central Office.

It is suggested that the APA Committee on International Relations in Psychology be urged to implement the full program as formulated in its 1956-57 report and that the committee be encouraged to make additional recommendations of actions which would facilitate exchanges of persons and of information between psychology in this country and abroad.

Some specific possibilities for immediate investigation are:

1. APA participation in the new Grants in Support of Visiting Foreign Scientists program recently announced by the National Science Foundation; one of the procedures of this program will be to provide grants to national associations. The visiting research scientists program of the International Cooperation Administration could also be studied. The committee should collaborate with the APA Board of Scientific Affairs in investigating this possibility.

2. Renewal of the Carnegie Corporation grant enabling APA to defray expenses of official delegates representing the APA at international conferences

3. Invitation to the International Union of Scientific Psychology to hold its 1963 International Congress in the United States. There are possible sources of financial support for such a congress.

4. Feasibility of organizing a Pacific Area Congress of Psychology for 1964. The APA Convention Manager has suggested this possibility,

with the congress site in Hawaii immediately following the APA Annual Convention in Los Angeles. Financial support might be available.

5. Development of aids for foreign psychologists and students who wish to obtain adequate information concerning opportunities for research and study at pre- and postdoctoral levels. A very useful, but much more ambitious project would be to consider, perhaps in collaboration with the International Union of Scientific Psychology, the feasibility of collecting similar information for other countries as well as the United States.

Communication with other national scientific and professional organizations. Past experience has shown that good communication between APA and other national scientific and professional organizations can be fruitful not only at organization levels, but also in facilitating cooperation among individual members of associations. Mere appointment of official APA representatives or of committees on relations with other organizations is not sufficient; these representatives and committees must play their roles actively—as many have done in the past.

Less formal communication and also be beneficial and, therefore, should be encouraged. For example, the APA Executive Secretary has, for several years, joined with executive officers of the major national organizations in the natural sciences in an informal Conference of Scientific Society Managing Officers. The conference meets several times each year to discuss issues of common interest to operations of their associations and to the national scientific community as a whole. These discussions are not only informative, but are also of value when actions must be taken. The usefulness of this conference suggested the potential value of a similar informal arrangement among the national social science organizations. APA was host to the first meeting of this new group in April 1959.

The potential contributions of psychologists and their colleagues in the social sciences to the "maintenance of peace" are being discussed more frequently today than in the past. Some of the strongest urging that these scientists should be given more opportunities to show their worth is coming from outside the disciplines themselves. For example, the proposal has been made to establish an "Academy of Social Sciences"

to act as a cleaninghouse on a nationwide basis through which the results of social research can be coordinated and

made available for the planning of social action (Meyer, 1958).

The functions of the academy would be: to collect research findings, to interpret them, to make recommendations for the conduct of new crucial research, and "to fill one of our greatest needs, long-term research on basic problems that would prove its worth in years to come." This proposal, made by a well-known citizen, has received considerable attention; it emphasizes some of the actions which scientists consider themselves most competent to take. The question arises: should not the scientific disciplines be the leaders in proposals toward these ends, utilizing as fully as possible the current interests of other citizens?

It is suggested that those APA boards to which the association's representatives and committees on relations with other organizations report make a special effort now to develop ways in which these representatives and committees can function most effectively in facilitating communication between APA and other national organizations. It is also suggested that the APA Central Office be encouraged to continue to develop and maintain informal channels of communication as it deems desirable.

An APA Program in National and International Affairs

The extension of present programs includes only a part of APA's possible contributions; there are a number of other possibilities, some of which are described below. To shape these and other future opportunities into a sound and imaginative program will require more than the efforts of preparing a single report. Taken as a whole the opportunities may be conceived as constituting a general and rather diverse program directed eventually toward increasing the contributions of psychologists to national and international affairs.

Coordinating the program. The success of any program of this kind depends upon the wisdom and enthusiasm of those who participate in it and also upon the skill with which it is coordinated. APA's accepted procedure for administering its various programs is through boards or committees supported by the association's Central Office staff. It is believed that the present program, with the exceptions of those responsibilities already assigned to

existing boards or committees, should be administered in this traditional manner.

It is suggested that APA establish a Committee on Psychology in National and International Affairs.

Under the provisions of the APA By-Laws for special committees, this committee could be created by vote of the Council of Representatives or the Board of Directors (Article XI, Section 1). It is further suggested that the committee consist of not less than six members of the APA, who shall serve for terms of not less than three years each. The committee could be concerned with: (a) recommending to the Board of Directors actions which would increase APA's contributions to the "maintenance of peace" as outlined in the first paragraph of this section of the report; (b) coordinating actions within this general frame of reference which are approved by the Board of Directors and the Council of Representatives; (c) maintaining liaison as appropriate with APA boards, committees, and divisions and with other organizations whose special interests intersect those of the committee. The committee should consider short- as well as long-term contributions. It should, during its first year of existence, concentrate its attention upon the detailed planning of its immediate and long-range program and should report its plans to the Board of Directors and the Council of Representatives at the end of that year.

It is strongly suggested that a senior member of the APA Central Office staff be designated as Staff Participant to this committee and that this should be considered one of his major assignments.

As Staff Participant he could assist the committee in its continuing staff work and in the coordination of its program. He could be particularly helpful in those aspects of the program which involve establishing and maintaining contacts with other national and international groups. In providing this assistance he would frequently be called upon to serve as the representative of the committee.

It is the firm belief of those who have reviewed the present report that the establishment of a special committee and the designation of a senior Staff Participant in the APA Central Office *must* be taken as joint and simultaneous actions if a program in national and international affairs is to succeed.

Possible content of the program. The following

suggestions are some of those which could be considered by the committee in formulating its initial program.

1. *Broad-gauged, programmatic examination of the field.* The committee could explore with other interested groups the desirability and feasibility of undertaking a comprehensive analysis of human factors in the "maintenance of peace."

join together with specialists in other fields in order to create a broad-gauged group to look into the problem.

An alternate approach would be to establish a working group of interested APA members willing and competent to undertake either a comprehensive study of the general issue or studies of certain of its more specific facets. A working group of this kind might well hold an extended summer seminar similar in conception to the Estes Park seminar of 1958 (Taylor, 1958). Another possibility would be to

form committees of psychologists in half a dozen large cities or university centers to meet intensively for a period to consider various suggestions and work out more detailed proposals.

This plan would provide wider opportunities for participation in this phase of the program and could well lead, as have the Oslo and other discussion groups described above, to the development of researchable hypotheses and clearer views of ways in which present knowledge can be put to work.

2. *Critical reviews of current knowledge.* The committee could encourage the preparation of critical reviews of what is already known about various facets of the general issue and of what methods are available for learning more. Such reviews could be particularly useful contributions at this time when psychology has opportunities to contribute its knowledge and skills to a variety of national affairs; critical assessments of what psychologists know at present and what they still must learn are important in taking advantage of these opportunities without the risks of promising more than can be accomplished. Such reviews would be helpful preparation for psychologists who could serve as advisors on the issues covered by their reviews. The committee could lend its support to publications and other media by which critical reviews could be made easily available.

3. *Development of research activities.* Earlier this report made reference to developments of research activities relevant to the "maintenance of

peace" as defined here. Research activities tend to gain momentum as new areas of problems are opened up and new methods are applied. One important contribution of the committee could be to remain alert to these advances and to make them clearly visible by the use of such traditional devices as publications and symposia.

APA could do much in stimulating interest in research on the maintenance of peace and in making it evident that there are problems which are researchable.

It should be clear that the committee's responsibilities are to aid in stimulating and facilitating the development of research activities and not to function itself as an operating research organization.

4. *Research support.* The committee could investigate sources of financial support for research within its general field of interests. A published list of such sources, describing their rules and frames of reference, would be helpful, particularly to research workers new to the field.

Clear definition of the field and evidence that its problems are researchable might lead to examination of possibilities such as the following:

the establishment of an SSRC committee in this area.

the development of a federal program in support of behavioral science research relevant to the maintenance of peace.

a corresponding sort of agency to SDC that would use some of the best brains in psychology, economics, sociology, and the other social sciences and that would have an adequate budget . . .

5. *Contacts with other nongovernmental organizations interested in the general field.* Other national and international groups are as concerned as APA with the need to give special attention at this time to the general issues considered in this report. The committee might find the ideas and actions of these groups useful in planning its own program.

6. *Contacts with federal government agencies.* The committee could consider ways in which federal government agencies—e.g., the National Security Council, the State Department, the Department of Defense, the International Cooperation Administration, the United States Information Agency—could make fuller use of psychological knowledge and skills than they now do. Past experience suggests that psychologists are most effective in their work with such agencies when they concentrate their efforts on specific problems to

which they can apply their special competences. Some federal government agencies are well acquainted with these special competences and know where to seek them; others have had little or no experience with the contributions psychologists might make to their activities. From contacts with the agencies the committee could assess opportunities for the utilization of psychological competences. It is certain that agencies will not provide such opportunities if they are not aware that such competences exist; it is also true that opportunities will not continue for long unless psychologists are prepared to take advantage of them.

by developing a roster of psychologists who would be willing and able to serve as advisors . . .

the committee could be ready to provide assistance when it would be most useful.

7. Contacts with national policy makers. The possibility that psychological knowledge and skills might be useful to the nation's policy makers also deserves exploration. The committee might capitalize on some of the contacts already available to APA; the APA Central Office receives requests for information and testimony from members and committees of the Congress which could, at least in some instances, be used as opportunities to raise matters of interest to the new APA program.

The Congressional Fellowship Program of the American Political Science Association is a kind of possibility that should be investigated. This is a one-year program for young people with competences in political science or journalism. It begins with a month's orientation period and is followed by numerous conferences with members of Congress and others during the remainder of the year; four months are spent as a staff member in the office of a House member or committee, and four in the office of a Senator or Senate committee; opportunities are provided for individual and team research; stipends, traveling expenses, and other costs of operating the program are covered by foundation grants. During 1959-60, the program's seventh year, 15 young people will participate. The effects of the program have been to provide opportunities for such young people to learn at firsthand more about the complex problems with which policy makers are faced and to relate their special knowledge and skills to these problems; the program has also acquainted the policy makers with the potential values of these special competences and has

led them to seek such competences when problems arise. The basic ideas of this type of program might well be adapted for use by APA.

8. General dissemination of information. In 1958 the APA Council of Representatives accepted a "Statement of Policies and Objectives for Guiding Public Information Activities" prepared by the APA Committee on Public Information. This statement points out that

To make its maximum contribution, a scientific and professional group must be understood to some degree by various publics or groups of decision makers. Hence, if the science and professions of psychology are to advance and to play their proper roles, the necessary steps must be taken to insure that psychologists and their work be widely understood outside the technically informed group.

The general dissemination of information, observing APA's policies guiding public information activities, deserves consideration by the proposed Committee on Psychology in National and International Affairs. The consideration could be aided by close liaison with the APA Committee on Public Information and the APA Central Office.

9. International projects in noncontroversial areas. In his State of the Nation Address of 1959 the President urged cooperation on international projects in noncontroversial areas. APA is capable of providing more cooperation of this kind than it has in the past. Some suggestions are contained in the 1957 Annual Report of the APA Committee on International Relations. Recently the Subcommittee on Reorganization and International Organizations of the United States Senate Committee on Government Operations through its Chairman, Senator Hubert H. Humphrey, invited APA's cooperation

in furnishing us with your suggestions as to what might be done to strengthen the cooperation of the behavioral sciences with medical sciences in opening up new horizons of health collaboration throughout the world.

One of the specific fields of interest to Humphrey's subcommittee is the proposed Mental Health Year, about which the subcommittee has been in close touch with the World Federation for Mental Health. The United States National Commission for UNESCO, administered by the Department of State, has asked

that the national organizations interested in educational, scientific and cultural relations, especially those represented on the National Commission, should examine with care the program of UNESCO and the activity of the National Com-

mission to determine where they can make more effective contributions

APA is one of these national organizations.

These are only a few of the opportunities APA now has to contribute to international affairs of a noncontroversial nature. The committee could be of great assistance in advising APA when opportunities of this kind arise.

10. *Present competences to mobilize skills and knowledge.* Throughout the preceding discussion there are important time factors which deserve special attention. Most of the possible contributions suggested so far involve the future rather than the present, yet present contributions may be of particular importance. It would be very helpful to APA, its Central Office, and members generally if the committee could suggest policies and procedures concerning psychologists' present competences to mobilize skills and knowledge relevant to current practices in the "maintenance of peace." What kinds of skills and knowledge can psychologists mobilize? When should they keep their mouths shut? How can relevant skills and knowledge be mobilized? Who should be responsible for mobilizing them? APA and individual psychologists are now being approached more and more frequently by government agencies and other organizations for assistance in regard to a wide variety of issues involving human factors; suggestions as to how psychologists might put their present competences to most effective use in such instances, while still recognizing their limitations, would be a helpful contribution.

11. *Training and encouraging psychologists to function in the general field.* As the committee develops its program and as the roles psychologists could play are more clearly defined, the matter of preparing psychologists to function in the general field could be expected to arise. Traditionally APA has given much thought to such matters; this is background from which the committee, in collaboration with the APA Education and Training Board, could benefit in studying the requirements of preparation for the new roles.

PROSPECTS

"Maintenance of peace" is an issue which concerns all citizens. It is also a frightening phrase: its effect at first sight can be overwhelming and can produce the withdrawal response of escape by disowning it as a subject for psychologists to consider.

But the "implementation of war" was equally frightening in the 1940's. At that time, however, the APA made an impressive contribution to the organization of effort in World War II. Many psychologists believe that we can now organize our efforts to make an equally impressive contribution to the maintenance of the peace after World War II.

EDITOR'S NOTE. *At the sixty-seventh Annual Meeting of the American Psychological Association, the Board of Directors reported to the Council of Representatives that it has established an Ad Hoc Working Group on Psychology in National and International Affairs, as outlined in the above report, with Roger W. Russell as Chairman.*

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PROPOSED STANDARDS FOR APA *DIRECTORY* LISTINGS OF PRIVATE PRACTICE

BOARD OF PROFESSIONAL AFFAIRS COMMITTEE ON PRIVATE PRACTICE

Editor's Note: *The following represents a summary of a report written for the Board of Professional Affairs by the Committee on Private Practice in April 1959 and of a report by a special subcommittee of the Committee on Private Practice in August 1959. The report presents proposed standards for the guidance of members wishing to list themselves in the APA Directory as being in private practice. The Board of Directors voted, upon recommendation of the Board of Professional Affairs, that the proposed standards be published with a request for suggestions and comments from all interested members and relevant organizations and committees. Among such groups are state association committees on ethics and professional practice, local psychological groups organized around problems of private practice, APA committees concerned with the development and administration of ethical standards, APA and APA-related boards concerned with the development of standards of training and assessment of competence. The present plan is to present these standards, as revised in the light of comments, for approval of the Council of Representatives in September 1960. Comments and suggestions should be sent to the Chairman of the Committee on Private Practice: William McGehee; Fieldcrest Mills; Spray, North Carolina.*

AT its 1958 Annual Meeting, APA had expressed a determination to continue vigorous enforcement of its ethical code. Contained in the latter (and explicated in the policy statement on relations with other professions) are qualifications relating to the private practice of psychology. A problem arises out of the fact that no comparable standards are being systematically applied to "private practice" entries in the *APA Directory*.

The first charge of the committee was, therefore, that of recommending minimum standards which should guide the listing of private practice in the *Directory* (recognizing that such listing does not imply APA endorsement). In its review, the committee was asked to take into account the discrepancies between APA national policies and the standards written into existing state legislation.

As the committee sees it, the above is a necessary job of house cleaning. As the same time, however, the issue of *Directory* listings is part of a bigger problem, the latter having several aspects:

1. The spelling out of some of the implications of various sections of the ethical code
2. The setting up of clear-cut standards against which APA and its members can check qualifications for independent private practice in such areas as psychotherapy, counseling, and industrial psychology
3. The necessity for distinguishing clearly between ethics and competence (the former can often simply be "attested" via education and years of training, while the latter needs always to be "evaluated")
4. The cultivation and encouragement of desirable professional habits

Again, in looking at the problem more broadly, the committee saw that it had many kinds of dimensions, among them the following:

Conditions of Practice

1. Setting
 - a. Institutional
 - b. Group
 - c. Independent
2. Degree of commitment
 - a. Full-time
 - b. Part-time
3. Nature of specialization
 - a. Predominant function: e.g., diagnosis, psychotherapy
 - b. Predominant area: e.g., marriage counseling, attitudinal measurement, vocational guidance, motivation research

Nature of Controls Imposed

1. Outer and/or inner
 - a. Standards imposed from without
 - b. Ethical values operating from within
2. Organizational and/or legal
 - a. APA standards of training and experience
 - b. State legislation governing use of the title "psychologist" or defining the functions constituting psychological practice
3. Idealistic and/or realistic
 - a. Standards to which to aspire
 - b. Standards likely to be observed and capable of being enforced

Viewing its assignment in this broader context, the committee first attempted a definition of private practice, next drew up a set of suggested minimum standards, considered some of their implications, and pro-

posed ways in which the regulations, if adopted, might be implemented.

Private practice is defined as follows: A psychologist in any area of psychology (clinical, industrial, social, experimental, etc.) is in independent private practice when he assumes independent professional responsibility for services to and relationships with a client or clients without the mediating controls of institutional or group membership.

Two sets of standards have been proposed. One for the guidance of APA members who have been elected to the association since 1958, the other for the guidance of those who were Fellows or Members of the APA as of January 1, 1958, the effective date of the current APA membership standards. The standards are as follows:

The following shall constitute the minimum standards for engaging in the independent private practice of psychology (whether full-time or part-time), and for representing oneself as so engaged (by means of *Directory* listings, announcements of practice, and the like), except in the case of individuals who as of January 1, 1958 were Fellow or Members of the APA:

1. A PhD degree, based in part on a doctoral dissertation, conferred by a department of psychology which at the time the degree was awarded met the standards of the APA, or the equivalent of such a degree

2. At least three years of paid full-time experience, or its equivalent in part-time paid experience (at the minimum rate of 15 hours per week) to be obtained subsequent to two years of graduate study and in the general field of specialization in which the psychologist is engaged in private practice, such experience to have been:
 - a. in an institutional or group setting, and
 - b. under direct supervision, preferably by a psychologist, or by another professional worker of recognized standing

Individuals who became Fellows or Members of the APA on or before January 1, 1958 shall fulfill one of the following minimum standards:

1. Possess the ABEPP Diploma in the field of psychology in which the individual engages in independent private practice; or

2. Possess a PhD degree (or an equivalent doctoral degree) in psychology from a recognized university and at least two years of paid full-time experience (or its equivalent in part-time paid experi-

ence at the minimum rate of 15 hours per week) in an institutional or group setting; or

3. Have two years of graduate training in psychology at a recognized university or college and at least three years of paid full-time experience (or its equivalent in part-time paid experience at the minimum rate of 15 hours per week) in an institutional or group setting; or

4. Have two years of graduate training in psychology at a recognized university or college and at least five years of paid full-time experience (or its equivalent in part-time paid experience at the minimum rate of 15 hours per week) in independent private practice

As used in the foregoing statements, group practice is defined as the cooperative practice of two or more psychologists (or allied professional workers) who (a) share some professional responsibilities together, (b) engage in some distinct group functions (such as common referral services or regular case presentations and seminars), and (c) include as members of the group at least one psychologist who could qualify, under the above provisions, as an independent private practitioner.

No involved screening procedure would be set up. Instead, members who wish to list themselves in the *Directory* as being in independent private practice would check a designated place on the *Directory* form, thereby assuming responsibility for fulfilling the APA's standards. A copy of the standards, if approved, would be sent to all current APA members, and routinely thereafter to all new members at the time of election.

The suggested standards are intended as criteria by which members can decide whether they may legitimately list themselves in the APA *Directory* as engaged in private practice. Psychologists who believe that they measure up to certain minimum standards, once these are formally approved, should be permitted, without special application or investigation, to list themselves as being in such practice. If complaints of unethical listings are brought against them, they would then have to present evidence of good faith in asking for such a listing. With few exceptions, APA members are responsible, honest individuals who may and should be given responsibility for policing their own ranks, once clear-cut standards of ethics are made available to them.

It is vital that there be widespread discussion of the proposed standards and that opinions be reported to the committee. Whatever standards are adopted must be fair, both to present and prospective independent private practitioners; and they must be enforceable over a period of time, with appropriate "grandfather" provisions. It should be emphasized, however, that the

adoption of a set of standards will not in and of itself replace the basic ethical responsibilities already spelled out in our previous codes and policy statements.

In dealing with the problem of discrepancies between present and proposed APA standards and those contained in state legislation, the committee hopes to attempt at least a partial resolution of the differences by developing a set of standards for *group* private practice. It may also be possible to facilitate the process by which APA standards influence and gradually raise state legislation standards, assuming this is appropriate. In this regard, attention should be called to the report of the Committee on Relations with Psychiatry (*Amer. Psychologist*, 1958, **13**, 761-763) and to our policy

statement, *Psychology and its Relations with Other Professions* (adopted in 1953, published in 1954), as relevant aspects of the problem to which the Board of Professional Affairs and the Committee on Private Practice have addressed themselves.

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THE MYTH OF MENTAL ILLNESS

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MY aim in this essay is to raise the question "Is there such a thing as mental illness?" and to argue that there is not. Since the notion of mental illness is extremely widely used nowadays, inquiry into the ways in which this term is employed would seem to be especially indicated. Mental illness, of course, is not literally a "thing"—or physical object—and hence it can "exist" only in the same sort of way in which other theoretical concepts exist. Yet, familiar theories are in the habit of posing, sooner or later—at least to those who come to believe in them—as "objective truths" (or "facts"). During certain historical periods, explanatory conceptions such as deities, witches, and microorganisms appeared not only as theories but as self-evident *causes* of a vast number of events. I submit that today mental illness is widely regarded in a somewhat similar fashion, that is, as the cause of innumerable diverse happenings. As an antidote to the complacent use of the notion of mental illness—whether as a self-evident phenomenon, theory, or cause—let us ask this question: What is meant when it is asserted that someone is mentally ill?

In what follows I shall describe briefly the main uses to which the concept of mental illness has been put. I shall argue that this notion has outlived whatever usefulness it might have had and that it now functions merely as a convenient myth.

MENTAL ILLNESS AS A SIGN OF BRAIN DISEASE

The notion of mental illness derives its main support from such phenomena as syphilis of the brain or delirious conditions—intoxications, for instance—in which persons are known to manifest various peculiarities or disorders of thinking and behavior. Correctly speaking, however, these are diseases of the brain, not of the mind. According to one school of thought, *all* so-called mental illness is of this type. The assumption is made that some neurological defect, perhaps a very subtle one, will ultimately be found for all the disorders of thinking and behavior. Many contemporary psychia-

trists, physicians, and other scientists hold this view. This position implies that people *cannot* have troubles—expressed in what are *now* called "mental illnesses"—because of differences in personal needs, opinions, social aspirations, values, and so on. *All problems in living* are attributed to physicochemical processes which in due time will be discovered by medical research.

"Mental illnesses" are thus regarded as basically no different than all other diseases (that is, of the body). The only difference, in this view, between mental and bodily diseases is that the former, affecting the brain, manifest themselves by means of mental symptoms; whereas the latter, affecting other organ systems (for example, the skin, liver, etc.), manifest themselves by means of symptoms referable to those parts of the body. This view rests on and expresses what are, in my opinion, two fundamental errors.

In the first place, what central nervous system symptoms would correspond to a skin eruption or a fracture? It would *not* be some emotion or complex bit of behavior. Rather, it would be blindness or a paralysis of some part of the body. The crux of the matter is that a disease of the brain, analogous to a disease of the skin or bone, is a neurological defect, and not a problem in living. For example, a *defect* in a person's visual field may be satisfactorily explained by correlating it with certain definite lesions in the nervous system. On the other hand, a person's *belief*—whether this be a belief in Christianity, in Communism, or in the idea that his internal organs are "rotting" and that his body is, in fact, already "dead"—cannot be explained by a defect or disease of the nervous system. Explanations of this sort of occurrence—assuming that one is interested in the belief itself and does not regard it simply as a "symptom" or expression of something else that is *more interesting*—must be sought along different lines.

The second error in regarding complex psychosocial behavior, consisting of communications about ourselves and the world about us, as mere symptoms

of neurological functioning is *epistemological*. In other words, it is an error pertaining not to any mistakes in observation or reasoning, as such, but rather to the way in which we organize and express our knowledge. In the present case, the error lies in making a symmetrical dualism between mental and physical (or bodily) symptoms, a dualism which is merely a habit of speech and to which no known observations can be found to correspond. Let us see if this is so. In medical practice, when we speak of physical disturbances, we mean either signs (for example, a fever) or symptoms (for example, pain). We speak of mental symptoms, on the other hand, when we refer to a patient's *communications about himself, others, and the world about him*. He might state that he is Napoleon or that he is being persecuted by the Communists. These would be considered mental symptoms *only* if the observer believed that the patient was *not* Napoleon or that he was *not* being persecuted by the Communists. This makes it apparent that the statement that "X is a mental symptom" involves rendering a judgment. The judgment entails, moreover, a covert comparison or matching of the patient's ideas, concepts, or beliefs with those of the observer and the society in which they live. The notion of mental symptom is therefore inextricably tied to the *social* (including *ethical*) *context* in which it is made in much the same way as the notion of bodily symptom is tied to an *anatomical* and *genetic context* (Szasz, 1957a, 1957b).

To sum up what has been said thus far: I have tried to show that for those who regard mental symptoms as signs of brain disease, the concept of mental illness is unnecessary and misleading. For what they mean is that people so labeled suffer from diseases of the brain; and, if that is what they mean, it would seem better for the sake of clarity to say that and not something else.

MENTAL ILLNESS AS A NAME FOR PROBLEMS IN LIVING

The term "mental illness" is widely used to describe something which is very different than a disease of the brain. Many people today take it for granted that living is an arduous process. Its hardship for modern man, moreover, derives not so much from a struggle for biological survival as from the stresses and strains inherent in the social intercourse of complex human personalities. In this context, the notion of mental illness is used to

identify or describe some feature of an individual's so-called personality. Mental illness—as a deformity of the personality, so to speak—is then regarded as the *cause* of the human disharmony. It is implicit in this view that social intercourse between people is regarded as something *inherently harmonious*, its disturbance being due solely to the presence of "mental illness" in many people. This is obviously fallacious reasoning, for it makes the abstraction "mental illness" into a *cause*, even though this abstraction was created in the first place to serve only as a shorthand expression for certain types of human behavior. It now becomes necessary to ask: "What kinds of behavior are regarded as indicative of mental illness, and by whom?"

The concept of illness, whether bodily or mental, implies *deviation from some clearly defined norm*. In the case of physical illness, the norm is the structural and functional integrity of the human body. Thus, although the desirability of physical health, as such, is an ethical value, what health is can be stated in anatomical and physiological terms. What is the norm deviation from which is regarded as mental illness? This question cannot be easily answered. But whatever this norm might be, we can be certain of only one thing: namely, that it is a norm that must be stated in terms of *psycho-social, ethical, and legal* concepts. For example, notions such as "excessive repression" or "acting out an unconscious impulse" illustrate the use of psychological concepts for judging (so-called) mental health and illness. The idea that chronic hostility, vengefulness, or divorce are indicative of mental illness would be illustrations of the use of ethical norms (that is, the desirability of love, kindness, and a stable marriage relationship). Finally, the widespread psychiatric opinion that only a mentally ill person would commit homicide illustrates the use of a legal concept as a norm of mental health. The norm from which deviation is measured whenever one speaks of a mental illness is a *psycho-social and ethical one*. Yet, the remedy is sought in terms of *medical* measures which—it is hoped and assumed—are free from wide differences of ethical value. The definition of the disorder and the terms in which its remedy are sought are therefore at serious odds with one another. The practical significance of this covert conflict between the alleged nature of the defect and the remedy can hardly be exaggerated.

Having identified the norms used to measure

deviations in cases of mental illness, we will now turn to the question: "Who defines the norms and hence the deviation?" Two basic answers may be offered: (a) It may be the person himself (that is, the patient) who decides that he deviates from a norm. For example, an artist may believe that he suffers from a work inhibition; and he may implement this conclusion by seeking help for himself from a psychotherapist. (b) It may be someone other than the patient who decides that the latter is deviant (for example, relatives, physicians, legal authorities, society generally, etc.). In such a case a psychiatrist may be hired by others to do something to the patient in order to correct the deviation.

These considerations underscore the importance of asking the question "Whose agent is the psychiatrist?" and of giving a candid answer to it (Szasz, 1956, 1958). The psychiatrist (psychologist or nonmedical psychotherapist), it now develops, may be the agent of the patient, of the relatives, of the school, of the military services, of a business organization, of a court of law, and so forth. In speaking of the psychiatrist as the agent of these persons or organizations, it is not implied that his values concerning norms, or his ideas and aims concerning the proper nature of remedial action, need to coincide exactly with those of his employer. For example, a patient in individual psychotherapy may believe that his salvation lies in a new marriage; his psychotherapist need not share this hypothesis. As the patient's agent, however, he must abstain from bringing social or legal force to bear on the patient which would prevent him from putting his beliefs into action. If his *contract* is with the patient, the psychiatrist (psychotherapist) may disagree with him or stop his treatment; but he cannot engage others to obstruct the patient's aspirations. Similarly, if a psychiatrist is engaged by a court to determine the sanity of a criminal, he need not fully share the legal authorities' values and intentions in regard to the criminal and the means available for dealing with him. But the psychiatrist is expressly barred from stating, for example, that it is not the criminal who is "insane" but the men who wrote the law on the basis of which the very actions that are being judged are regarded as "criminal." Such an opinion could be voiced, of course, but not in a courtroom, and not by a psychiatrist who makes it his practice to assist the court in performing its daily work.

To recapitulate: In actual contemporary social usage, the finding of a mental illness is made by establishing a deviance in behavior from certain psychosocial, ethical, or legal norms. The judgment may be made, as in medicine, by the patient, the physician (psychiatrist), or others. Remedial action, finally, tends to be sought in a therapeutic—or covertly medical—framework, thus creating a situation in which *psychosocial, ethical, and/or legal deviations* are claimed to be correctible by (so-called) *medical action*. Since medical action is designed to correct only medical deviations, it seems logically absurd to expect that it will help solve problems whose very existence had been defined and established on nonmedical grounds. I think that these considerations may be fruitfully applied to the present use of tranquilizers and, more generally, to what might be expected of drugs of whatever type in regard to the amelioration or solution of problems in human living.

THE ROLE OF ETHICS IN PSYCHIATRY

Anything that people *do*—in contrast to things that *happen* to them (Peters, 1958)—takes place in a context of value. In this broad sense, no human activity is devoid of ethical implications. When the values underlying certain activities are widely shared, those who participate in their pursuit may lose sight of them altogether. The discipline of medicine, both as a pure science (for example, research) and as a technology (for example, therapy), contains many ethical considerations and judgments. Unfortunately, these are often denied, minimized, or merely kept out of focus; for the ideal of the medical profession as well as of the people whom it serves seems to be having a system of medicine (allegedly) free of ethical value. This sentimental notion is expressed by such things as the doctor's willingness to treat and help patients irrespective of their religious or political beliefs, whether they are rich or poor, etc. While there may be some grounds for this belief—albeit it is a view that is not impressively true even in these regards—the fact remains that ethical considerations encompass a vast range of human affairs. By making the practice of medicine neutral in regard to some specific issues of value need not, and cannot, mean that it can be kept free from all such values. The practice of medicine is intimately tied to ethics; and the first thing that we must do, it seems to me, is to try to make this clear and explicit. I shall

let this matter rest here, for it does not concern us specifically in this essay. Lest there be any vagueness, however, about how or where ethics and medicine meet, let me remind the reader of such issues as birth control, abortion, suicide, and euthanasia as only a few of the major areas of current ethicomedical controversy.

Psychiatry, I submit, is very much more intimately tied to problems of ethics than is medicine. I use the word "psychiatry" here to refer to that contemporary discipline which is concerned with *problems in living* (and not with diseases of the brain, which are problems for neurology). Problems in human relations can be analyzed, interpreted, and given meaning only within given social and ethical contexts. Accordingly, it *does* make a difference—arguments to the contrary notwithstanding—what the psychiatrist's socioethical orientations happen to be; for these will influence his ideas on what is wrong with the patient, what deserves comment or interpretation, in what possible directions change might be desirable, and so forth. Even in medicine proper, these factors play a role, as for instance, in the divergent orientations which physicians, depending on their religious affiliations, have toward such things as birth control and therapeutic abortion. Can anyone really believe that a psychotherapist's ideas concerning religious belief, slavery, or other similar issues play no role in his practical work? If they do make a difference, what are we to infer from it? Does it not seem reasonable that we ought to have different psychiatric therapies—each expressly recognized for the ethical positions which they embody—for, say, Catholics and Jews, religious persons and agnostics, democrats and communists, white supremacists and Negroes, and so on? Indeed, if we look at how psychiatry is actually practiced today (especially in the United States), we find that people do seek psychiatric help in accordance with their social status and ethical beliefs (Hollingshead & Redlich, 1958). This should really not surprise us more than being told that practicing Catholics rarely frequent birth control clinics.

The foregoing position which holds that contemporary psychotherapists deal with problems in living, rather than with mental illnesses and their cures, stands in opposition to a currently prevalent claim, according to which mental illness is just as "real" and "objective" as bodily illness. This is a confusing claim since it is never known exactly what

is meant by such words as "real" and "objective." I suspect, however, that what is intended by the proponents of this view is to create the idea in the popular mind that mental illness is some sort of disease entity, like an infection or a malignancy. If this were true, one could *catch* or *get* a "mental illness," one might *have* or *harbor* it, one might *transmit* it to others, and finally one could get *rid* of it. In my opinion, there is not a shred of evidence to support this idea. To the contrary, all the evidence is the other way and supports the view that what people now call mental illnesses are for the most part *communications* expressing unacceptable ideas, often framed, moreover, in an unusual idiom. The scope of this essay allows me to do no more than mention this alternative theoretical approach to this problem (Szasz, 1957c).

This is not the place to consider in detail the similarities and differences between bodily and mental illnesses. It shall suffice for us here to emphasize only one important difference between them: namely, that whereas bodily disease refers to public, physicochemical occurrences, the notion of mental illness is used to codify relatively more private, sociopsychological happenings of which the observer (diagnostician) forms a part. In other words, the psychiatrist does not stand *apart* from what he observes, but is, in Harry Stack Sullivan's apt words, a "participant observer." This means that he is *committed* to some picture of what he considers reality—and to what he thinks society considers reality—and he observes and judges the patient's behavior in the light of these considerations. This touches on our earlier observation that the notion of mental symptom itself implies a comparison between observer and observed, psychiatrist and patient. This is so obvious that I may be charged with belaboring trivialities. Let me therefore say once more that my aim in presenting this argument was expressly to criticize and counter a prevailing contemporary tendency to deny the moral aspects of psychiatry (and psychotherapy) and to substitute for them allegedly value-free medical considerations. Psychotherapy, for example, is being widely practiced as though it entailed nothing other than restoring the patient from a state of mental sickness to one of mental health. While it is generally accepted that mental illness has something to do with man's social (or interpersonal) relations, it is paradoxically maintained that problems of values (that is, of ethics) do not

arise in this process.¹ Yet, in one sense, much of psychotherapy may revolve around nothing other than the elucidation and weighing of goals and values—many of which may be mutually contradictory—and the means whereby they might best be harmonized, realized, or relinquished.

The diversity of human values and the methods by means of which they may be realized is so vast, and many of them remain so unacknowledged, that they cannot fail but lead to conflicts in human relations. Indeed, to say that human relations at all levels—from mother to child, through husband and wife, to nation and nation—are fraught with stress, strain, and disharmony is, once again, making the obvious explicit. Yet, what may be obvious may be also poorly understood. This I think is the case here. For it seems to me that—at least in our scientific theories of behavior—we have failed to *accept* the simple fact that human relations are inherently fraught with difficulties and that to make them even relatively harmonious requires much patience and hard work. I submit that the idea of mental illness is now being put to work to obscure certain difficulties which at present may be inherent—not that they need be unmodifiable—in the social intercourse of persons. If this is true, the concept functions as a disguise; for instead of calling attention to conflicting human needs, aspirations, and values, the notion of mental illness provides an amoral and impersonal “thing” (an “illness”) as an explanation for *problems in living* (Szasz, 1959). We may recall in this connection that not so long ago it was devils and witches who were held responsible for men’s problems in social living. The belief in mental illness, as something other than man’s trouble in getting along with his fellow man, is the proper heir to the belief in demonology and witchcraft. Mental illness exists or is “real” in exactly the same sense in which witches existed or were “real.”

¹ Freud went so far as to say that: “I consider ethics to be taken for granted. Actually I have never done a mean thing” (Jones, 1957, p. 247). This surely is a strange thing to say for someone who has studied man as a social being as closely as did Freud. I mention it here to show how the notion of “illness” (in the case of psychoanalysis, “psychopathology,” or “mental illness”) was used by Freud—and by most of his followers—as a means for classifying certain forms of human behavior as falling within the scope of medicine, and hence (by *fiat*) outside that of ethics!

CHOICE, RESPONSIBILITY, AND PSYCHIATRY

While I have argued that mental illnesses do not exist, I obviously did not imply that the social and psychological occurrences to which this label is currently being attached also do not exist. Like the personal and social troubles which people had in the Middle Ages, they are real enough. It is the labels we give them that concerns us and, having labelled them, what we do about them. While I cannot go into the ramified implications of this problem here, it is worth noting that a demonologic conception of problems in living gave rise to therapy along theological lines. Today, a belief in mental illness implies—nay, requires—therapy along medical or psychotherapeutic lines.

What is implied in the line of thought set forth here is something quite different. I do not intend to offer a new conception of “psychiatric illness” nor a new form of “therapy.” My aim is more modest and yet also more ambitious. It is to suggest that the phenomena now called mental illnesses be looked at afresh and more simply, that they be removed from the category of illnesses, and that they be regarded as the expressions of man’s struggle with the problem of *how* he should live. The last mentioned problem is obviously a vast one, its enormity reflecting not only man’s inability to cope with his environment, but even more his increasing self-reflectiveness.

By problems in living, then, I refer to that truly explosive chain reaction which began with man’s fall from divine grace by partaking of the fruit of the tree of knowledge. Man’s awareness of himself and of the world about him seems to be a steadily expanding one, bringing in its wake an ever larger *burden of understanding* (an expression borrowed from Susanne Langer, 1953). *This burden*, then, *is to be expected and must not be misinterpreted*. Our only *rational* means for lightening it is *more understanding*, and appropriate *action* based on such understanding. The main alternative lies in acting as though the burden were not what in fact we perceive it to be and taking refuge in an outmoded theological view of man. In the latter view, man does not fashion his life and much of his world about him, but merely lives out his fate in a world created by superior beings. This may logically lead to pleading nonresponsibility in the face of seemingly unfathomable problems and difficulties. Yet, if man fails to take increasing responsibility for his

actions, individually as well as collectively, it seems unlikely that some higher power or being would assume this task and carry this burden for him. Moreover, this seems hardly the proper time in human history for obscuring the issue of man's responsibility for his actions by hiding it behind the skirt of an all-explaining conception of mental illness.

CONCLUSIONS

I have tried to show that the notion of mental illness has outlived whatever usefulness it might have had and that it now functions merely as a convenient myth. As such, it is a true heir to religious myths in general, and to the belief in witchcraft in particular; the role of all these belief-systems was to act as *social tranquilizers*, thus encouraging the hope that mastery of certain specific problems may be achieved by means of substitutive (symbolic-magical) operations. The notion of mental illness thus serves mainly to obscure the everyday fact that life for most people is a continuous struggle, not for biological survival, but for a "place in the sun," "peace of mind," or some other human value. For man aware of himself and of the world about him, once the needs for preserving the body (and perhaps the race) are more or less satisfied, the problem arises as to what he should do with himself. Sustained adherence to the myth of mental illness allows people to avoid facing this problem, believing that mental health, conceived as the absence of mental illness, automatically insures the making of right and safe choices in one's conduct of life. But the facts are all the other way. It is the making of good choices in life that others regard, retrospectively, as good mental health!

The myth of mental illness encourages us, moreover, to believe in its logical corollary: that social intercourse would be harmonious, satisfying, and the secure basis of a "good life" were it not for the disrupting influences of mental illness or "psychopathology." The potentiality for universal human happiness, in this form at least, seems to me but another example of the I-wish-it-were-true type of fantasy. I do not believe that human happiness or

well-being on a hitherto unimaginably large scale, and not just for a select few, is possible. This goal could be achieved, however, only at the cost of many men, and not just a few being willing and able to tackle their personal, social, and ethical conflicts. This means having the courage and integrity to forego waging battles on false fronts, finding solutions for substitute problems—for instance, fighting the battle of stomach acid and chronic fatigue instead of facing up to a marital conflict.

Our adversaries are not demons, witches, fate, or mental illness. We have no enemy whom we can fight, exorcise, or dispel by "cure." What we do have are *problems in living*—whether these be biologic, economic, political, or sociopsychological. In this essay I was concerned only with problems belonging in the last mentioned category, and within this group mainly with those pertaining to moral values. The field to which modern psychiatry addresses itself is vast, and I made no effort to encompass it all. My argument was limited to the proposition that mental illness is a myth, whose function it is to disguise and thus render more palatable the bitter pill of moral conflicts in human relations.

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WHEN ARE COOKBOOKS USEFUL?¹

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IN his call for a good cookbook, Meehl (1956) maintains that, in the interest of economy and of precise, reliable personality description, the clinician has no choice but to replace his own activity as a test interpreter with automatic procedures, cookbooks, which can be used by clerks. Meehl poses the choice of technique as the problem and champions the cookbook as the solution. I hope to show that in practice there is an issue prior to the choice of technique: the position the psychologist chooses to take in response to a referral. Depending on that position, he will find the cookbook either an essential tool, or irrelevant to his interests.

The psychologist's activity as a tester takes place in the framework of a situation. I wish to limit this analysis to clinical situations in which one can designate three people who are directly involved in the testing: the patient, referring person, and tester. Together they constitute a triadic group. This triad is a genuine group inasmuch as the members are part of a network of mutual influence. When any pair of members interact, it goes without saying that they influence their relation to each other; but in addition they can influence the relation of each to the usually absent third member.

This interdependence is evident even when the referral process is considered somewhat abstractly. The referral question emerges from the interaction of patient and referring person: the latter is prompted to make the referral by his reaction to something in his experience with the patient. Thus it is the referring person's reaction to the patient that brings the tester into the situation. And, after all, it is the purpose of the tester's transactions with the patient to influence the relation between patient and referring person. For the testing is useful in a clinical sense to the extent that it has some impact on the treatment of the patient.

¹ An abbreviated version of this paper was read at the APA Annual Convention, September 1959.

THE DIAGNOSTIC "TRIAD"

It is this interdependence of the members of the triad that permits us to regard this group, rather than the test situation alone, as the immediate context of the tester's activity. Thus, when speaking of the position the psychologist chooses to take in response to a referral, I have in mind his position in this group, especially his position with regard to the referring person.

In any given instance, the members of the triad are particular individuals who are initiating and reacting to events within the system, this group. What are these events like, when viewed from within the system? Let us begin with the action of the referring person. He puts a question to the tester. Now this questioner, much as you and I, is a purposeful being. He seeks to achieve what appear to him to be desirable goals and, to that end, makes the referral. He is serious—his purpose, if made explicit, might strike someone else as absurd or his choice of means might seem inappropriate, but he would hardly have made the referral if *he* had thought so. Furthermore, he refers to the psychologist and not to some other expert because he believes his purpose will be served by giving the patient psychological tests.

The nature of the referring person's purpose or interest is rarely conveyed in the referral; usually it remains unknown to the tester. In this case the tester's behavior can never be quite the same as it would be were the purpose known to him. What can the tester, call him A, do once in receipt of the referral and ignorant of the purpose it is meant to serve? He can act on the basis of an assumption that he knows the referring person's purpose, i.e., act *as if* he knew. A's action on this basis is bound to be unrealistic, since it is based on the illusion that he has information he does not in fact possess. Alternatively, the tester can take the tack that the purpose of the referring person, a Z, is of no consequence to him and hence may be ignored. As we

shall see, this is not realistic either. In any event, the tester acts on receipt of the referral by proceeding to test the patient.

A is acting in a particular context of fact (i.e., ignorance of Z's purpose) and belief (that the purpose is known or of no consequence and hence may be ignored). By proceeding to test the patient, A takes Z's word for it, so to speak, that testing the patient is the appropriate means to the end Z has in mind. By acting on the referral without concern for the purpose his action serves, A asserts that he regards the referral as an imperative, and one with which he is ready to comply. By offering his observations, conclusions, and opinions as instruments to be employed at the discretion of Z, A serves as a means for Z. A has assigned to the person of Z the locus of responsibility for the use to which his report may be put. In this organization of the diagnostic triad, the tester's orientation to messages from the referring person is that of someone awaiting orders; his position in the group is that of a means or instrument; and the user of the instrument, the referring person, is responsible for the use to which the tester's work is put.

One consequence of this organization of the triad is to be found in the character of the tester's behavior with the patient, another in the faulty communication between tester and referring person. The tester, A, is a purposeful being too, and once in the testing situation with the patient he pursues his interests. Because he believes them necessary to his work, he tries to get test responses from the patient. The relation of patient and tester here parallels that of tester and referring person. A's acceptance of the position of means to Z's goal has its parallel in A's efforts to use the patient, in turn, as an instrument for obtaining test responses. The nature of this patient-tester relation finds expression in the ubiquitous concern of testers with "controlling" the test situation. That means, in practice, keeping the patient's psychopathology from interfering with your efforts to obtain responses from him; paradoxically, the responses are to be used to throw light on some aspect of that psychopathology.

Inasmuch as the tester wants something from the patient, he can be gratified or frustrated by him. The sensitive patient quickly realizes that his own stake in giving responses is equalled or surpassed by the tester's stake in getting them, and not infrequently a power struggle ensues. Schafer (1954)

has described some of the modes of adaptation available to testers under these conditions. In contrast to the view presented here, however, Schafer regards the tester's desire for responses as an inevitable feature of the test situation.

The tester's abdication of interest in the referrer's purpose leads to a situation in which the tester's interest in the patient is focused on the patient as a facilitator or obstructor of his, the tester's, interests. It seems to me fair to say that this impersonalizes the relation or dehumanizes it; this is important inasmuch as these terms are used to describe the cookbook approach by clinicians who are critical of it. When diagnostic testing is done under these conditions, the tester-patient relation is dehumanized whether one uses paper and pencil inventories scored by IBM machine, the Rorschach test analyzed by free association of the tester, or Meehl's cookbook.

A complete description of the sampling situation in which the tester makes his observations would have to include the fact that the tester-patient relation is characterized by the tester's stake in the patient's behavior. This description raises the empirical question of whether one can generalize, from the patient's behavior in a situation in which the "other" wants something from him and has a stake in the relation that may surpass the patient's, to a situation which does not have these features, e.g., psychotherapy.

Though the tester's conclusions may have limited generalizability, the relation between A and Z has such gross effects on the communication of those conclusions that the limitations are overshadowed. A is satisfied to try to answer Z's question. He knows Z is a competent clinician and leaves to him the responsibility for deciding whether and in what ways his answer can serve Z's interests. But if A's answer is in effect an instrument in Z's hands, its meaning will be a function of the use to which Z puts it. In his ignorance of the referrer's purpose, A has no reason to believe that his answer will mean to Z what he intended it to mean. No less unrealistic is Z, when he uses the report on the assumption that it does indeed lend itself to his purpose. For example: Z asks A to tell him whether his patient has a schizophrenic illness or is no more than severely neurotic. A proceeds to examine the patient and presents his answer at a ward conference: the patient is schizophrenic. Z announces that this settles the matter, he is going to transfer

the patient to a locked ward from the open ward to which he had been admitted. The tester feels that his answer is in no way suited to the use to which it has been put: he did not mean to say he thought the patient required locked ward care; and, if he had known that that was the decision confronting Z, he would have proceeded differently in the examination and given a different "answer." This tester was fortunate in being present when his answer was put to use: he could see that he had been acting as if he knew Z's purpose, without in fact knowing it.

THE ROLE OF THE TESTER

I believe that the role of the tester as described here is not uncommon in practice. It is that of a *technician*. It is this *role*, so to speak, that requires the use of cookbooks. Once the population of "questions" is defined and the appropriate research which will provide cookbooks for answering them is carried out, it becomes possible for the tester to fill the technician's role and the referring person to fill the complementary one with a minimum of confusion. Referrers can be taught precisely what cookbook answers mean, in the sense that they learn precisely how these answers are produced. Under such circumstances, the referring person is responsible for assessing the implications of this answer in the context of the other information available to him. Were these cookbooks to be used in a clinical setting, the situation would be very much like that in which the internist in a clinic sends his patient to the laboratory to have a blood count. The use to which his answer will be put is a matter of no professional concern to the laboratory technician. He would do exactly the same thing in any case. The internist's confidence that the "answer" he gets means precisely one thing—i.e., that it was obtained through a particular procedure that is for all practical purposes invariant—permits him to use this information with confidence in the context of other data on the patient in order to arrive at a rational decision.

Thus the conditions which demand the introduction of cookbooks and in which cookbooks made the greatest contribution are described by a particular *relation between the tester and the referring person*. In that relation the tester's role is that of a technician. Perhaps the most important feature of that role is the tester's disavowal of interest in the purpose of the referring person. Once the psychologist

has *chosen this role*, the interests of economy and effectiveness of communication, as well as of the usefulness of his activity, demand the use of cookbooks.

I have pursued at some length the implications and consequences of the psychologist's reaction to the referral in the circumstance that he does not know the purpose it is meant to serve. What else can he do; is there another alternative? There is: he can act so as to enlighten himself on the issue in the mind of the referrer. To do so suggests a fundamental shift in A's orientation and position in the triad. In order to make clear that I am no longer speaking of quite the same A, I shall call the psychologist, B. What does B do in response to the referral? In contrast to A's response—testing the patient—B will call on the referrer to discuss the referral.

What goes on in B's mind to lead him to this unexpected course of action? B regards the referral as a request for help. It indicates to him that Z has a problem which Z believes lends itself to solution by means of testing his patient. Z may very well be right, but Z's belief and action on it are insufficient evidence for B—insufficient for *him* to act on by testing the patient. B believes that he is the better judge of whether giving Z's patient tests is likely to be helpful, that therein lies his expertness. He is interested in being of assistance to Z and his patient, with the choice of means to be made to suit the occasion. B cannot make a rational decision as to whether and, if so, how he can be helpful to Z if he does not know what issue confronts Z and what Z is trying to accomplish. When he seeks a meeting with Z, it is an expression of his interest in being helpful to him.

How might such a meeting go? B wants to reach an understanding of the problem confronting the referring person, but a shared understanding. He finds he can best grasp the issues involved when he has a clear picture of the clinical phenomenon presented by the patient and the referrer's reaction to this phenomenon. The former (the clinical phenomenon) without the latter (a reaction) does not make for a problem! An example of the workings of B, in contrast to A, can be seen when Z requests that his patient be tested in order to differentiate between schizophrenia and obsessive compulsive reaction. B wonders: how come this patient is referred with this question at this time. What difference will it make if he turns out to have one or

the other illness? He decides to meet with Z face to face!

I would like to point out that what B does first is reflect; he has *recognized* a problem and is thinking and acting in a way oriented toward solving it. I do not think there is any question but that this kind of activity is both in fact and by definition beyond the capacities of cookbooks or any other actuarial or computing device.

B's problem is to discover, in a sense, what the "problem" is. In the course of his talk with Z, in which he conveys to Z his reaction to the referral, it becomes clear that Z has noticed that the patient's behavior changes, even during the course of an hour, from obsessional ruminations to the expression of bizarre ideas, and grandiose expansiveness. Z finds the shifts puzzling, but more than that, finds that his growing conviction that the patient may be schizophrenic is difficult to reconcile with his observation of periods in which psychotic features do not seem to be in evidence. Thus one might regard Z's way of thinking about schizophrenia as a "problem." That is, his thinking seems categorical: this either is or is not "a schizophrenic"; and if he is, the schizophrenia should be evident 24 hours a day, every day. Once this idea becomes explicit, Z loses interest in the diagnostic question *per se*.

One could say that B has done his job: Z realizes that, although his patient's behavior does not invariably reveal psychosis, he does meet the criteria for the diagnosis. But Z is dissatisfied: he still feels the patient's behavior is puzzling. He speculates with B that something in the transactions between himself and the patient elicits these changes. B is interested in the problem. He would like to examine the patient with the idea in mind that he may be able to observe such shifts as Z describes and come to an understanding of what it takes to elicit the changes. Indeed Z and B may have some tentative notions about the relevant conditions, so that B's examination might take the form of a test of alternative hypotheses.

The problem confronting B in this new role is not one of comparing the patient with others (diagnostic categorization), but of observation and deduction. That is, observing the behavior of the patient under the variation of conditions of the psychological examination and attempting to understand the patient's variable behavior in terms of some conceptualization. Depending on the extent

of the pre-examination consultation, B may go into the examination with alternative hypotheses about the issue at hand or merely seek to make sufficient observations as to permit the statement of hypotheses about it. These hypotheses may, in turn, be tested by the referrer in his subsequent contact with the patient. Hopefully, B will not attempt to use the same set of data (the observations made in the examination) as both the source of an hypothesis and evidence for it. In its way, this kind of "diagnosis" can be as scientific as that provided by the actuarial approach.

B embarks on the examination of a patient with an interest in understanding something about the behavior of a patient, rather than in getting test responses from him. Since he is acting out of his own interests, he is unburdened by a sense of obligation or duty, especially that of "getting the patient tested." He is not interested in getting the patient to do something, but in the patient, whatever the patient does. For this reason, the scope of his attention is not limited to the behavior of the patient as a facilitator or obstructor.

I believe that under these conditions a clinician's sensitivity to the position and difficulties of a patient is maximized. There are no objective grounds upon which a patient can engage him in a power struggle. The patient's psychopathology is something B can observe and react to without the "ulterior motive" of getting the patient back to the test material. He can see, perhaps for the first time, that a patient has not "rejected" all the Rorschach cards, but looked carefully at each with an incredulous expression on his face before he announced that he saw "Nothing." Moreover, he can say to the patient that he looked not so much as if he could see nothing in the cards but as if he could not believe what he did see. He finds that the "guarded, negativistic" patient openly explains that B is quite right: he is sure that, if he said what he saw, he would be considered crazy; and his therapist would win out in his efforts to establish that he is too sick to be discharged from the hospital. As so often happens, the patient's talk about his view of the situation proves more illuminating than any "test response." As a consequence of the shift in the psychologist's position in the triad, he becomes aware of the patient as another member of it, someone with a position and orientation in the group.

B's position in the examination differs from A's.

Different sorts of information are of interest to and become available to B, other than those of interest to and available to the technician. This role of B in the diagnostic triad is that of a *consultant*.² It represents the alternative to that of a technician. The important differences between these two roles arise from the differences in the position or orientation of the psychologists in them. Their respective views—of the referral as a message, of the locus of responsibility for their decisions and conclusions, and of the relevance of the referring person's purpose—give rise to their distinctive transactions with referring person and patient.

Theoretically the kinds of activity in which the clinician cannot be replaced by the cookbook represent the limits of computing machines, of which the cookbook is a special case. While indicating that he believes these activities to have no place in diagnostic testing practice, Meehl describes them as problem solving and spontaneously noticing what is

relevant. Indeed, these activities do not seem to be required of the technician, but it is evident that they are part and parcel of the consultant's role.

It is interesting to me that the same issues of role and professional identity have confronted the specialty of radiology through much of its brief history and that there the alternatives have been clearly stated (Christie, 1946): either the radiologist functions as a consultant or he can be replaced by a "combination of the X-ray technician and the specialists in other branches who interpret their own films."

Whether clinical psychologists in diagnostic triads choose the technician's or the consultant's role, they cannot help but choose. And in making this choice, they determine the usefulness of cookbooks.

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²I am indebted to L. B. Fierman for the observation that the roles here characterized correspond to those of the technician and consultant in radiology.

TOWARD EARLIER CREATIVITY IN PSYCHOLOGY

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CLARK states in *America's Psychologists* (1957, p. 109) that only some 4% of his significant contributors had thought of psychology as a career when in high school and only 23% when in the first two years of college. The first figure seems congruent with Visser's finding (1947, p. 527) that only 9% of the starred psychologists (those voted by a panel of their fellows as most eminent) in *American Men of Science* from 1903 through 1943 had before the age of 19 decided to specialize in their field; however, 59% of the starred chemists, 48% of the astronomers, and 31% of the zoologists had decided upon their specialization before that age—23% of the total group of starred cases had reached a decision to become a scientist before 15. Lehman (1953) reports median age of most notable contributions by 52 outstanding chemists as 34, and modal most productive 5 years 23–29; a few important chemical discoveries were by persons in their teens. However, 39 was the median age of 65 psychologists' most outstanding contributions, none of these appearing before the age of 25. Further, of chemists who made 21 or more contributions of some importance, average age of the first was 22 as contrasted with 36 for those making only one. In practically every major field, most notable work tended to be early.¹ Conceivably the psychologists'

¹ Questions have been raised regarding Lehman's evidence to this effect, as that fewer mentions in the literature of a scientist's later work may be due not to its poorer quality but rather to the greater competition then because of increasing amounts of scientific publication. Such factors need careful consideration. But later publications of a man already well recognized probably get more attention than those of a young unknown; Einstein's later work surely was given consideration, but his early papers seem generally judged most important. In the past, competition presumably increased less rapidly, yet it still appeared that (for instance) Newton's early work was most brilliant. In poetry, painting, music, evaluations were on various bases, work done mostly long ago, and competition very different from now in science; yet greatest creativity was also usually early. And a variety of other matter, little marshaled by Lehman in support of his conclusion (as regards physical vigor and health, incidence of mental disease,

late fruition had limited both the quantity and quality of their work. Anyhow, the situation seemed worth examining.

BEGINNINGS OF CAREER IN TWO FIELDS

For information regarding careers of notable psychologists, the four volumes of the *History of Psychology in Autobiography* (Murchison, 1932–52) seemed the outstanding source. In these volumes, only 28 Americans gave sufficient information about themselves to serve in the present study. Only one of these seemed to have made even a tentative decision to specialize in psychology before the junior year of college. Six did not so decide until after college graduation. So Thurstone entered psychology via engineering. Perhaps for him it was a desirable mode of development.

But for the most part the elementary cause of the late start seemed to be the fact that psychology was not usually offered before the junior year of college and was to some an unknown topic; thus, E. L. Thorndike declared that he had no "memory of having heard or seen the word psychology until my junior year at Wesleyan University when I took a required course in it." A few had earlier interests, but no courses were available. So Hunter at the age of 15 had purchased and read Darwin's *Origin of Species* and when 17 became interested in psychology after a preparatory school roommate lent him a text in the field. Pillsbury wrote that when 14 and in the second year of high school he had chanced upon a copy of Carpenter's *Mental Physiology* in his father's library, read it with great interest, and declared that he would like to specialize in psychology. However, not until upper class work with Wolfe at Nebraska did that interest really get underway. And Terman described observations he had made while still a boy regarding memory and afterimages.

age of enthusiasms, and devotion to causes), is also congruent with his findings. But, anyhow, his many instances of notable early accomplishments are unquestioned, and it would seem that career should begin early enough for these to occur, if a man has them in him.

The gist of it seemed to be that these psychologists did not start earlier because they did not know about the subject or could not because courses were not earlier offered. Probably some good people were thus missed; Harold Urey said in a recent telecast that he went to college planning to be a psychologist but changed to chemistry because no courses were available to him in the first subject before his junior year. The fewer reports, adequate for this purpose, of the European psychologists seemed largely to the same effect.

For a comparison, biographies of 20 leading chemists (as listed in a recent study by Lehman) were gone over. Before the age of 12, 7 of the 20 had already shown interest in science; only one had not shown such interest by the age of 18. By the age of 17, scientific interests of 6 had already been strongly stimulated by a teacher and 12 by a parent; 11 had done some work for a parent or teacher related to science—as helping a father in his pharmacy or a teacher to look after a school laboratory. By the age of 20, 4 had already published something. Clearly, both the generally recognized status of chemistry as a science, and both school and home influences in youth and even childhood, brought earlier interest in and preparation for a career in chemistry. That such early interest is now appearing in many sciences is illustrated by the winners in the last Science Talent Search. First was a 17-year-old boy who had in secondary school built a particle accelerator and decided on physics as his field. Second was a lad of the same age who had already done a bit of original research in zoology and as a child of five was reading in that field (*Science Newsletter*, March 14, 1959). And the question is as to suggestions obtainable, from past records and distinctive current school and college programs, as to desirable facilitations of psychological careers.

POSSIBLE FACILITATIONS OF CAREER

Jastrow, Judd, Hunter, and E. L. Thorndike obtained the doctorate when 23 and Washburne when 22; median doctorate age of the 28 American psychologists in the autobiographies was 26.8 which was early even for their times—the first 100 psychologists in the 1921 *American Men of Science* obtaining the degree between 1909 and 1920 did so at a median age of 29.5. And the first 150 pages of the 1958 *APA Directory* showed the 1,223 there listed as receiving the PhD between 1950–57 doing

so still later, at a median age of 31.2 with 24% at 35 or over. However, similar samplings in *American Men of Science* for 1921 and 1955 showed median age of the doctorate in chemistry in 1909–20 to be 28.0; and in 1950–54, 28.7. As compared with chemists, psychologists thus tend to obtain the doctorate older—and increasingly so.

However, in spite of late choice of field, notable early American psychologists tended to get into career young: four obtained the undergraduate degree at 19, and the doctorate often took only three years, Judd taking only two. All this is very congruent with the finding of Lewis and Pressey (1958) that the 20 most prominent of 115 men who prior to 1947 had taken the doctorate in psychology at Ohio State University had obtained their undergraduate degree a year and a half younger, and the PhD three and a half years younger, than the 20 least prominent. And in correspondence Clark states that he found analogous differences between his “significant contributors” and psychologists in general: his monograph reports a median of four years from undergraduate degree to PhD for the first group as compared to seven for the second. It seems here also relevant that the last 20 presidents of the APA obtained their doctorates at a median age of 25.7—one at 22, one at 23, five at 24.

These various data surely suggest the desirability of completion of graduate training earlier than the thirties. Here apropos is a statement (Hobbs, 1957) of a recent committee of deans of graduate schools that now “generally the PhD takes at least four years to get, more often six or seven, and not infrequently ten to fifteen” and their recommendation that “except in most unusual cases, the whole program should not take more than *three* years of residence” [*italics theirs*]. However, simply to cut back to size a graduate program imported whole from Germany three-quarters of a century ago and not modified since—except for overextension—seems now not enough. As Oppenheimer has remarked (1958): “nearly everything that is now known was not in any book when most of us went to school; we cannot know it unless we have picked it up since.” Margaret Mead (1958) has put it more strongly: “for those who work on the growing edge of science . . . only a few months may elapse before something which was easily taken for granted must be unlearned or transformed to fit the new state of knowledge.” And she stresses the futility of trying to give

initial professional training adequate into the indefinite future; rather, the great need is for methods of "lateral transmission" of knowledge as now commonly in business, where "refresher" programs at intervals bring a person once more somewhat up-to-date. But if postdoctoral and later short special programs become usual, even more the initial long stretch of full-time education can be reduced and career begun earlier.

A sampling of catalogs shows psychology now available earlier in curricula than 40 years ago, though not till the sophomore year in two famous universities and about half the arts colleges. But the most important career influence, stressed by 19 of the Americans and mentioned in every adequate autobiography, might be harder to get early now because of the great numbers in beginning courses and absorption of senior staff members in graduate work and research: frequent personal contact with an outstanding psychologist. And so might early contact with other able students of similar interests and enthusiasms once career choice has been made, an influence also mentioned in many autobiographies.

A program, to which an associate dean devoted all his administrative time, for superior students at the University of Kansas here seems relevant (Waggoner, 1957). Selected in high school as outstanding and most given scholarships, from entrance these students had as advisors major faculty members. Even in the freshman year they were in seminars of eight to ten of their group, taught by senior faculty, and were allowed to take some junior-senior courses (prerequisites not infrequently being bypassed). "Several of the students as freshmen and sophomores received small research assistantships in various departments," and a few teaching assistantships in the sophomore year; "the effects of these experiences were very noticeable, especially in directing the thought of the students toward research and university teaching." In this connection it may well be noted that 6 of the 28 American psychologists in the autobiographies mentioned doing some research while undergraduates. Encouraged to take placement tests and obtain credit by examination and to carry academic loads heavier than average, some of the Kansas students obtained an undergraduate degree in three years and at once went into graduate school, at least two into psychology. A follow-up 20 years after (Pressey, 1955) of a somewhat similar but less

adequate program indicated, as only one outcome, a doubling of the number of students going on to obtain the doctorate, some of these being now outstanding in their fields.

All over the country efforts are being made to upgrade high school work, especially in science. Laboratory work is being stressed, also

"opportunities for individual work . . . identification of the program with industry and with institutions of higher learning . . . course offerings or research opportunities for the talented during summer vacation months" (Conant, 1958, p. 111).

Advanced work anticipating college courses and permitting college credit therefor is being stressed by the College Entrance Examination Board. Notable programs are appearing (Brandwein, 1955) involving continuing selection, special courses, laboratories open even in leisure hours for companionship there in scientific interests with other students and a teacher specially chosen for his enthusiastic capability. Junior academies, science fairs, and such contests as the Westinghouse Talent Search are giving prestige in the community and the student group to superior accomplishment in secondary school science. Even more than shown in the biographies of chemists of a generation or more ago, it might be expected that all these programs would nurture early choice of and progress toward scientific career.

Might psychology well have some place in all this? As already mentioned, Pillsbury at 14 and Hunter around 15 were, on their own, reading in psychology; at this same age Cyril Burt was reading Ward's article on psychology in the *Encyclopaedia Britannica* and starting manuscript notes "which proposed to cover the whole range of human character-qualities." Indeed, Piaget (Murchison, 1932-52, Vol. 4, p. 238) published his first scientific article (in ornithology) at the age of 10. Some psychology is now being offered in some high schools (Engle & Bunch, 1956). For able secondary school students, offerings in psychology as substantial as now in chemistry would seem possible. Might occasional precocity, in psychology, have unique characteristics and contribute uniquely to the science? If psychologically sophisticated about his precocity, such a youth should both weather the hazards thereof especially well and have a very special vantage point for consideration of many psychological phenomena. Suppose (for

instance) another Piaget should at the age of 10 read Piaget; might the boy contribute distinctive insights regarding the development of children's concepts?

In summary: data suggest that the present 31 is too old a median age for obtaining the doctorate in psychology, that earlier would increase and perhaps improve professional productivity.

Graduate school leaders are advocating that doctoral programs be shortened. Their remaking is urged by some distinguished scientists.

New programs for superior undergraduates involving first selection before entrance, throughout guidance and instruction by outstanding faculty members, skipping of repetitious freshman year work with admission even then to advanced courses, and research assistantships even in the second year give special promise of early finding and furthering creativity.

In the present great surge of improvement of secondary school science, psychology should be included, and in as substantial a form as the present best offerings in high school chemistry and biology.

Now in this country the development of excellence in athletics is a continuing process of selection and guidance and training, from the secondary school on. Something of this sort seems to be happening in Russian education, in science especially. The opinion is ventured that it should happen here

—also that, in psychology, precocity might well occur and be uniquely valuable.

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THE AGE DECREMENT IN OUTSTANDING SCIENTIFIC CREATIVITY¹

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ASUBJECT as significant as man's creative achievement is not easily exhausted. In this whole area strange things have happened. Whereas in some geographical areas during certain eras creativity has flourished luxuriantly, at other times and in other places creative achievement has been utterly lacking. In an earlier article (Lehman, 1947) data were presented which reveal that in several cultural areas significant contributions have been increasing at an exponential rate during the past few centuries in western Europe and America. Although the principle of exponential growth implies that growth tends to increase at a geometric rather than at an arithmetic rate, this does not mean that all exponential growth occurs at the same rate. This latter statement is well illustrated by my finding that for seven fields of endeavor output was found to have doubled in approximately every 25 years, and for six other fields it doubled in approximately every 50 years. The following tabulation reveals these facts.

Areas in which outstanding contributions doubled approximately every:

25 YEARS	50 YEARS
Botany	"Best books"
Chemistry	Economics and political science
Entomology	Medicine and public hygiene
Genetics	Pathology
Geology	Philosophy
Grand opera	Symphonic and orchestral music
Mathematics	

It seems clear that with the passage of time the rate of increase of important output has varied greatly from field to field, and in dealing with that problem this article attempts to extend quantitative methods into an area which heretofore has been somewhat outside the range thereof.

THE INDEX OF CITATION AND HOW IT WAS OBTAINED

In the writer's book (1953), *Age and Achievement*, there are a number of age curves showing

¹ This study was supported in part by a subvention from the Ohio University Fund.

an age decrement in outstanding creativity after a peak in relatively early years. In a recent article (Dennis, 1958) doubt has been expressed regarding the validity of the method that I employed for obtaining my data. Hence, the validity of my findings is also questioned. Dennis's criticism is based on data which he obtained as follows. By use of the catalog prepared by the Royal Society of London, he made an estimate of the world's total output of scientific publications for each decade from 1800 to 1900. The numbers of outstanding contributions cited in six source books that deal with the history of physics, chemistry, astronomy, biology, zoology, and physiology were then counted. An index was derived by computing the percentage of the total number of scientific contributions published in each decade that were cited in the six source books, and this percentage or "index of citation" was found to grow progressively smaller with the passage of time.

Although this latter finding can be interpreted in several different ways, Dennis believes that this index of citation should remain constant, and he implies that it is the fault of our historians of science that it does not. Thus, we are told that

It is the editors of source books rather than the eminent scientists who are responsible for the appearance of an age differential in the production of outstanding works (Dennis, 1958, p. 458).

His argument can be stated in the form of this syllogism.

Major premise: For each decade the citations in a history of science should be proportional in number to the total pool of scientific works published in that field during that decade.

Minor premise: For each decade the citations in our current histories of specific fields of science are *not* proportional in number to the total output.

Conclusion: Therefore, our current histories of science do not contain fair samples of the most outstanding scientific contributions unprejudiced by the age factor.

As will be shown later herein, not only is the major premise in the above syllogism unsound but, even if the major premise were valid, the conclu-

sion would still be an untestable hypothesis. Because my competence as a historian of science is limited, when I saw Dennis' article, I wrote to more than a score of current experts who supposedly should know something about the history of physics, chemistry, mathematics, geology, or astronomy. In my letter I told how the index had been obtained and stated the inference that had been drawn therefrom. I also suggested that, since I might have paraphrased it unfairly, the recipient of my letter would do well to read the original study. To stimulate personal interest, I enclosed in my letter a reprint of my most recently published study and, whenever possible, I also enclosed an age curve obtained from one of the recipient's published works.

My purpose in writing the letter of inquiry, the replies that I received, and the conclusion that I drew from the replies can all be summarized in the form of this syllogism.

Major premise: If our current expert historians in the physical sciences were to agree with my critic, I too would have to agree with him.

Minor premise: Collectively, the historians revealed a firm and unanimous conviction that the index of citation is irrelevant both to my method of study and also to my findings.

Conclusion: Therefore, I too reject the implication that the progressive decline in the index of citation provides a sound basis for questioning the validity of my findings.

Now for the evidence. I shall present first some expert verdicts and later factual data. It should first be noted that I reject not the data that Dennis has published but rather his interpretation thereof. It is always easier to collect data than it is to interpret it. Most data, including that of Dennis, admit of several possible interpretations. To me the progressive decline in Dennis' index of citation means only that *really great* contributions to science have been increasing at a slower rate than have run-of-the-mine contributions.

WHAT HISTORIANS OF SCIENCE THINK OF THE INDEX OF CITATION

Following are some pertinent statements made by the professional historians of science in their replies to my letter of inquiry.²

1. The crucial error in the argument based on the index of citation is the inference that contribu-

tions are "chosen at random" for inclusion in source books and histories of science. This is the key to the whole problem.

2. There is no good reason to suppose that for each decade the really great contributions to a given field of science have been proportional in number to the total output of publications in that field. There are many reasons for this lack of proportionality, including the increasing difficulty of the problems remaining to be solved; but, regardless of what a statistical study may show, this lack of proportionality is an undeniable fact. If plain common sense or intuition say otherwise, it should be remembered that, when dealing with technical questions, common sense and intuition are wrong more often than they are right.

3. If they were again to undertake the preparation of a history of science, not a single one of the historians would feel under any obligation to take the index of citation into consideration.

4. One historian remarked that his treatment of the available material was in no way influenced by restrictions of space, i.e., the number of pages in his book. He simply tried to include all discoveries of foremost importance, as free as possible from prejudice.

5. A great contribution to science is one which opens up a vast new area of exploration, a "break-through," which is followed by a rapidly proliferating multitude of related but subordinate investigations none of which would be placed on the same level as the one initial explosion that started the chain reaction.³ Hence, the mere fact that more papers were being published in a certain decade would by no means imply that more great ones were being published in that decade.

6. One historian cited a recent publication (Caplow & McGee, 1958) which points out that in the faculties of many major universities in the United States today, the evaluation of the faculty member's performance is based almost exclusively on publication; and, as one result of this, it has become the ambitious academician's sole ambition in many instances to accumulate a long list of published titles, a practice that has been labeled "title squirreling" (Time, 1958). Some workers have acquired a long

³ For example, to date perhaps as many as 100 investigations have been published validating Einstein's theory of relativity. Collectively, these validation studies are of great significance, but no one of them of itself is nearly as important as is the Einstein theory of relativity.

² I am grateful to these historians for their generous cooperation.

list of titles by the simple procedure of dressing a given set of findings in various guises and publishing almost the same conclusions under different titles and in various journals. Much of this literature need never have been published. It is true also that, as the number of journals has increased, some of them have been of questionable quality. It obviously is a misconception to assume that significant innovation has been doubled each time that the volume of publication has been doubled. The index of citation probably has more bearing on "title squirreling" than on actual creativity.

7. The production rate for scientists born prior to 1775 differs from that of more recently born scientists because the earlier born scientists were more reluctant to publish.

8. To assume that, when preparing his history, the historian of science should take the index of citation into account is to place significance on a percentile basis and to presume also that a fixed proportion of the top contributions made in any one decade are just as important as is the same proportion of contributions made during any other decade.

This assumption is fallacious because, although percentile scores can be employed for comparing performances that stand near the means of different distributions, they are useless for comparing the extremes of different distributions that have a wide range owing to the fact that the distances between consecutive steps near the middle tend to be much smaller than those between consecutive steps at the extremes. Contributions to science that stand out as milestones, or turning points, in the history of a science are so far above the average ones in merit that they cannot be identified by the application of percentile ratings on a decade basis. If one makes a distinction between creative work and the repetitive application of methods to new data, some decades might be skipped altogether.

The assumption that, if age data could be obtained from a hypothetical history of science in which the citations for each decade keep pace with the total output for that decade, the older scientists' production rate for contributions of highest quality would exhibit no decrement is nothing more than an untestable hypothesis. I say this because, if my incoming mail has been a fair sample, it is a good bet—a very good bet—that no competent historian of mathematics or of any physical sci-

ence can be found who will prepare, or even cooperate in preparing, such a hypothetical history.

NEW DATA

I shall now present new data which bolster my thesis that the age decrement in outstanding scientific creativity is not an artifact but a fact.

Sources of Information

Data were obtained from study of 44 histories of chemistry⁴ by authors from five different countries—Germany, France, England, Italy and the United States—22 of them published since 1940.⁵ From each history I copied down the name of each contributor to chemistry each time that it appeared if the history also mentioned both a specific contribution and a specific calendar date that would enable me to know when the contribution was either first made or first reported. By subtracting the date of birth of each contributor from the date on which he made or first reported his several contributions, it was possible to determine the ages of the contributors at the time they reported their contributions.

The names of all the contributors found in each history were later typed in alphabetical order. This procedure yielded 44 separate lists of names. When the factual information from all 44 histories had been typed in duplicate, I used the duplicate lists to make one long master list containing, in alphabetical order: the names of all contributors, their birth and death dates, the calendar dates on which they had reported their several contributions, their ages at the time they first reported each contribution, and the number of different histories that cited and discussed the work reported by each contributor during any one calendar year.

This last item of information was later employed on the assumption that a group of contributions each of which was cited and discussed in, say, 15 or 20 histories of chemistry is of greater importance to chemistry than is another group of contributions

⁴ The list of 44 histories can be found in *Science*, 1958, 127, 1213-1222.

⁵ For aid in assembling some of the European titles, I wish to thank E. Pietsch, Director of the Gmelin-Institut, Frankfurt-am-Main, West Germany, and also André Charbonnier of the Ecole Normale d'Instituteurs, Paris, France. I am also greatly indebted to many American advisers, especially to Mary Elvira Weeks, Henry M. Leicester, Eva Armstrong, and Lisbet Hansell of the Edgar Fahs Smith Memorial Collection in the History of Chemistry, University of Pennsylvania.

each of which is cited and discussed in only one or two such histories.

In the handling of my data no count was made of the number of times a particular contribution was mentioned and discussed between the covers of any one history; but, if several different contributions were made by the same individual during any one calendar year, each was counted. This means that a particular history might credit a given chemist with one specific contribution at a given chronological age level or it might credit him with several.

In making my master list, I simply totaled the number of different credits (or tallies) thus obtained from the 44 histories. Therefore, in the reading of this article it should be understood that the words "contribution" and "masterwork" refer not necessarily to one specific achievement but rather to the entire output that each chemist reported during any one calendar year. In most instances we know that this output consisted of one outstanding discovery, but this is not true in all cases. The reader should keep this fact in mind constantly, for it would be awkward to incorporate it in each of the numerous statements I shall make later in which I use the words "contribution," "one best contribution," and so on.

How Figure 1 Was Constructed

Figure 1 reveals the ages at which each of 57 well-known chemists⁶ made his one best yearly report, each such report being cited and discussed in not fewer than 19 of the 44 histories of chemistry. In the construction of Figure 1 the number of tallies received by each annual report was employed solely for the purpose of identifying the most significant annual reports. But in drawing Figure 1 each one best yearly report was assigned one credit only. In a study of Figure 1 it should be understood that it sets forth the average number of contributions per five-year interval. Suitable allowance is thus made for the fact that young chemists always comprise a larger group than do older ones.

For example, for the five-year interval from ages 30 to 34 inclusive, the 57 chemists made 19 of their one best yearly reports. This was 0.0667

⁶ The names of the 57 outstanding chemists, the ages at the time each made his one best annual report, plus several whole families of concentric age-curves all of which deal with achievement in chemistry appear in *Geriatrics*, 1960, 15, 19-37.

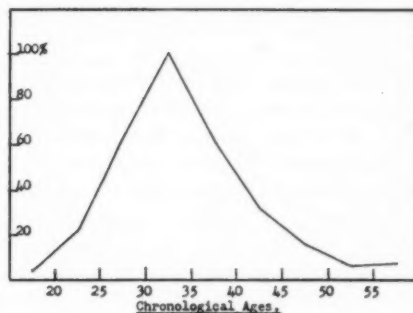


FIG. 1. The chronological ages at which 57 of our greatest chemists made his one best annual report, each such report being cited and discussed in not fewer than 19 of 44 histories of chemistry.

contributions per individual. The chemists that remained alive at ages 50 to 54 made only one contribution, which was 0.00429 contribution per living contributor. Figure 1 is drawn so as to be only 0.00429/0.0667 as high at ages 50 to 54 as it is at ages 30 to 34. The curve is drawn in this manner in order to show graphically that the average number of contributions per living chemist—that is, their production rate—was only 0.00429/0.0667 as large at ages 50 to 54 as it was at ages 30 to 34.

If, regardless of the number that remained alive, the older chemists had contributed at the same average rate as did the younger ones, the curve in Figure 1 would remain as high at the older age levels as at the younger levels. Actually, Figure 1 exhibits a very noticeable and consistent decrement at the uppermost age levels, thus indicating that with regard to these very superior contributions the 57 chemists became progressively less productive at the higher levels.

Ideally, we should know for each contribution just when the work first suggested itself to the contributor, how long it took him to accomplish it, the duration of the verifying procedure, how much time was required to get the manuscript ready for the editor, and the time lag between submitting the manuscript for publication and its appearance in print. All we know in most instances, however, is when the final work was published. The point I wish to make is that, since in Figure 1 the ages given are at least a year or two past the time that the 57 chemists' greatest original work was actually done, I fail to see how this figure could possibly *understate* their ages.

Histories of Science Are Rarely the Product of One Mind

In his reply to my letter of inquiry one historian remarked that in preparing his chronology he first consulted more than 50 individuals whom he regarded as the most competent to advise him with reference to the contributions that should be cited in his forthcoming chronology. Another said that, prior to writing his history, he first wrote to an unspecified number of eminent workers in his field and made a statistical list of their recommendations for inclusion in his forthcoming book. Still a third stated that, when he prepared his history, he first reread the familiar histories in his field and also read some unfamiliar ones.

Although the extent to which historians of science consult with others prior to writing their histories is unknown, it should be clearly evident that a history that appears under the name of a single historian is often the product of many minds. Hence, the number of experts whose appraisals determined the specific citations that appear in the 44 histories of chemistry that I employed for the construction of Figure 1 must have been far greater than appears at first blush. In view of this fact, the question arises: if one cannot depend upon the collective appraisals of so many experts in the history of chemistry, just where should or could one turn to obtain more trustworthy assessments? Although it is conceivable that an occasional historian of science may not have known enough or have read widely enough to catch

all the really significant contributions to his field, it is extremely unlikely that, *collectively*, the sources that I studied are invalid. To reject this large body of professional opinion is to imply that the task of evaluating chemistry contributions cannot be done at all!

The Age Differential Varies with Quality of Output

Dennis alleges that, as compared with the creative work of younger scientists, the achievements of older scientists are more likely to be slighted by our historians of science. On the contrary, it is far more probable that the later work of a scientist already well known in his field tends to receive more attention than does the work of a youthful unknown one. For example, Einstein's later work surely did not lack attention; but his basic papers on relativity and light quanta, published at age 25 or 26, are generally recognized today as much more important. And what is true of Einstein is true also of many others.

This is shown by Table 1 which sets forth, by five-year intervals, the percentages of all contributions to chemistry that were made by some 2,500 deceased chemists at and beyond certain age levels and that were cited and discussed in different numbers of the 44 histories of chemistry. This table reads as follows: of 6,347 contributions to chemistry each of which was mentioned in one only of the 44 histories, 94% were made at age 25 or beyond, 82% were made at age 30 or beyond, and so on.

TABLE 1
PERCENTAGES OF ALL CONTRIBUTIONS TO CHEMISTRY THAT WERE MADE AT CERTAIN AGES AND WHICH WERE
CITED AND DISCUSSED IN VARIOUS NUMBERS OF 44 HISTORIES OF CHEMISTRY

No. of Histories	No. of Contributions	Ages									
		Total Ages 25 to 39 Inclusive	25 and Over	30 and Over	35 and Over	40 and Over	45 and Over	50 and Over	55 and Over	60 and Over	65 and Over
1 only	6,347	43	94	82	66	51	38	27	17	11	6
2 only	1,426	45	94	82	66	49	34	22	14	8	5
3	661	50	94	78	61	44	33	22	13	7	3
4	388	50	96	82	65	46	33	22	14	6	2
5 or 6	362	48	96	80	64	48	31	19	11	4	2
7 to 9	246	51	96	82	63	45	32	15	7	2	1
10 to 14	204	54	93	78	62	39	25	13	7	2	—
15 to 19	90	72	99	72	49	27	14	6	2	—	—
20 or more	101	70	95	79	52	25	13	5	1	—	—
Row 9/Row 1 =		1.63	1.01	.96	.79	.49	.34	.19	.06	—	—

TABLE 2

PERCENTAGES OF "ONE BEST" ANNUAL REPORTS OF RESEARCH IN CHEMISTRY THAT WERE MADE AT CERTAIN AGES AND WHICH WERE CITED AND DISCUSSED IN VARIOUS NUMBERS OF 44 HISTORIES OF CHEMISTRY

No. of Histories	No. of "Best" Reports	Ages									
		Total Ages 25 to 39 Inclusive	25 and Over	30 and Over	35 and Over	40 and Over	45 and Over	50 and Over	55 and Over	60 and Over	65 and Over
1 only	836	50	91	75	56	41	29	19	13	7	5
2 only	330	54	94	78	57	40	28	19	11	5	2
3	178	63	95	77	54	32	22	14	10	8	4
4	85	61	95	75	56	34	21	11	6	2	—
5 or 6	98	56	98	77	56	42	26	16	7	2	—
7 to 9	76	56	93	74	53	37	26	12	4	—	—
10 to 14	66	54	88	70	55	34	26	14	8	4	—
15 to 19	30	78	93	63	50	15	12	4	0	—	—
20 or more	53	76	94	75	40	18	10	5	1	—	—
Row 9/Row 1 =		1.52	1.03	1.00	.71	.44	.34	.26	.08	—	—

The first row of Table 1 reveals the percentages of all minor contributions to chemistry (those cited in one history only) that were made at or beyond the indicated age levels, and the ninth row of this table sets forth similar information regarding all major contributions (those cited in 20 or more histories).

Notice in the ninth row of this table that, whereas 1% of the major contributions that were cited in 20 or more histories were made at age 55 or over, 17% of the contributions cited in one history only were made at age 55 or beyond. Notice also that, whereas none of the contributions made at age 60 or over were cited in as many as 15 or more of the 44 histories, 11% of the relatively minor ones (those cited in one history only) were made at age 60 or later. Although Table 1 makes no allowance for the death rate, the data shown therein strongly suggest that, when an oldster's contribution to chemistry is cited in a history of chemistry, its inclusion often is likely to be based on the eccentric opinion of an individual compiler and not representative of the group opinion of expert historians.

The tenth row of Table 1, which was obtained by dividing Row 9 by Row 1, permits a ready comparison of these two rows. For example, since only 43% of all the minor contributions to chemistry were made at ages 25 to 39 inclusive, and since 70% of all the major contributions were made at ages 25 to 39 inclusive, the major contributions were 1.63 as numerous at ages 25 to 39 as were the minor ones. Similarly, at ages 55 and over, the ma-

ior contributions were only .06 as frequent as were the minor ones. Reading along the tenth row from left to right it will be noted that the relative percentage of all the major contributions waned far more rapidly with increase in age than did the relative percentage of all the minor ones and that the decrement is progressive with increase in age.

Table 2 is like Table 1 except that Table 2 presents information regarding masterpieces only. Like Table 1, Table 2 reveals, particularly the data shown in the lower right quadrant, that, when the standard of excellence for inclusion in a given statistical distribution is higher, i.e., when more histories cite a given masterpiece, the distribution in which it appears includes a progressively smaller proportion of masterpieces that are the work of older chemists. But when the standard of excellence is lower (see upper right quadrant), the converse is true. The tenth row of Table 2 reveals that the relative percentage of the most important masterpieces declined much more rapidly with increase in age than did the relative percentage of the least important ones.

THE FINDINGS OF SOME OUTSTANDING SCHOLARS

I shall end this article by presenting a few deductions that have been made by some outstanding scholars who have read widely and thought deeply about this whole problem of creativity.

In the first Walter Van Dyke lecture delivered at the University of California in 1954, the late Lewis M. Terman (1954) referred to my findings

not as artifacts but as facts. He was so convinced of their validity that he advocated their widespread and immediate application. Here are Terman's words:

I have always stressed the importance of *early* discovery of exceptional abilities. Its importance is now highlighted by the facts Harvey Lehman has disclosed in his monumental studies of the relation between age and creative achievement. The striking thing about his age curves is how early in life the period of maximum creativity is reached. In nearly all fields of science, the best work is done between ages 25 and 35, and rarely later than 40. The peak productivity for works of lesser merit is usually reached 5 to 10 years later; this is true in some twenty fields of science, in philosophy, in most kinds of musical composition, in art, and in literature of many varieties. The lesson for us from Lehman's statistics is that the youth of high achievement potential should be well trained for his life work before too many of his most creative years have passed (p. 226).

G. H. Hardy (1941), a noted English mathematician, has written as follows in his biography:

I had better say something here about this question of age, since it is particularly important for mathematicians. No mathematician should ever allow himself to forget that mathematics, more than any other art or science, is a young man's game (p. 10).

James B. Conant (1947), former President of Harvard and also a student of the history of science, has said:

It may not be without significance that the new experimental philosophy, particularly the concern with air and vacua, was pushed forward in the period 1640-60 by the following who were all less than 30 at the mid-point of this period: (Pascal (27), Viviani (28), Boyle (28), had Torricelli lived till 1650 he would have been 42, von Guericke was six years older. Pneumatics in the mid-seventeenth century was a young man's game (p. 128)!

Still another historian of science (Taylor, 1941) has remarked:

It is somewhat thought-provoking to realize that the five men who were the first to comprehend the full import of the principle of the conservation of energy were all young men and were all professionally outside of the field of physics at the time that they made their contributions. These were Mayer, a German physician, aged twenty-eight; Carnot, a French engineer who preceded all the rest in the discovery and who will be discussed further in the next chapter, aged thirty-four; Joule, an English industrialist, aged twenty-five; and Colding, a Danish engineer who made the same discovery independently of the others and almost simultaneously, aged twenty-seven (p. 301).⁷

⁷ From *Physics: The Pioneer Science*, by L. W. Taylor, p. 301, reprinted by permission of Dover Publications, Inc., New York 14, New York. 2 vols. \$4.00.

Although quotes can often be found with which to offset other quotes, and although I do not pretend to have made an exhaustive search, it is highly doubtful that offsetting claims regarding the creativity of young men can be found in serious histories of science. Older men may be more scholarly, but they do not usually exhibit more originality than do younger ones.

To explain how he happened to choose for the title of his book *Young Chemists and Great Discoveries*, James Kendall (1929) wrote as follows:

Until I worked up the material for these Royal Institution Lectures in detail, I did not fully appreciate what a predominant part young chemists have played in the development of their science. It was with some surprise that I finally recognized that there are, indeed, very few significant discoveries in chemistry not due to "juveniles." If anybody doubts this, let him attempt to outline the contents of a volume entitled *Old Chemists and Great Discoveries*, taking a very liberal point of view with regard to the first adjective. If "old" means over seventy, or even over sixty, the book would be practically all cover; if over fifty-five, it would still be very slim. Reduction of old age to fifty would help somewhat, but the available material would still be rather scrappy and second-rate. Not only have young men and women made most discoveries in chemistry, but those discoveries have been the greatest (p. xiii).

The above quotations are of especial interest because, although my statistical findings can speak for themselves, these quoted remarks fit the facts (and also my findings) rather well.

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REVISION OF APA BYLAWS

APA POLICY AND PLANNING BOARD

The Policy and Planning Board is instructed by APA Bylaws to "review the structure and function of the Association as a whole in 1950 and in every fifth year thereafter and [to] make recommendations by written report to the Council of Representatives and by publication to the Association" (Article X, Section 5).

During the past year P&PB, and especially its Chairman for 1958-1959, Charles W. Bray, have worked with representatives of the APA Central Office and with our legal counsel in exploring ways in which APA might accomplish its functions most effectively. Discussions with legal counsel at first related primarily to a review of the objects of the APA, taking into account matters which conceivably might affect the association's tax-exempt status and attempting to strengthen APA's position in dealing with ethics cases. As P&PB dealt more extensively with the Bylaws, it became clear that a major revision in the form of the Bylaws should be done at this time. Foremost was the feeling that APA Bylaws should incorporate only those features of APA organization and function over which the full membership should exercise control and that matters of procedure and policies which are not of great concern to the full membership be determined by action of the Council of Representatives. These actions of Council should be codified in a set of Rules of Council in order to preserve them in orderly form.

The second major principle was that the Bylaws should be written in such a way as to permit some modification in practice as new problems emerge. Thus, the exact size of standing boards and committees ought not be specified; their minimum size and the method for constituting them should. With the increased role which state associations will play in APA, it is essential that appropriate division of functions be indicated: we would like to provide for these groups reasonable autonomy to enable them to vary their procedures in seeking solutions to professional problems, but would like to minimize the involvement of APA in such activities.

The proposed revisions have been discussed at great length by P&PB, they have been sent to major boards and committees of APA for review, they were discussed in the 1959 Annual Meeting of the Council of

Representatives. The change in Article I which was originally proposed for discussion at the 1959 Council meeting has been modified in wording by P&PB on the basis of that discussion and subsequent suggestions. The factors involved in the change are described in detail in the footnote accompanying that article. We believe that members who read these portions carefully will appreciate the need to write a statement of purpose in the terms we have used.

Almost all other changes remove from the Bylaws details of procedure which are properly established as rules of the Council of Representatives. The major exception to this is the prescribing in the Bylaws of detailed procedures to be followed in ethics cases. Members are urged to read the proposed changes in Article III, Section 18, and in Article X, Section 5, and to note especially that the Council of Representatives no longer would be involved in direct action on ethics cases. Another change is the proposed provision that the Publications Board appoint editors rather than nominate a panel of candidates who then are voted upon by Council members.

We believe the proposed Bylaw changes strengthen APA and are desirable changes. We recommend their approval. But we also solicit responses from members who have proposals for improvements in our recommendations. We also request statements in opposition to any parts of the proposed changes. Comments and inquiries may be sent to the APA Central Office for forwarding to the P&PB or may be sent directly to the Chairman: Kenneth E. Clark; Department of Psychology, University of Minnesota; Minneapolis 14, Minnesota. All such communications will be reviewed and used in preparing the presentation of a mail ballot on Bylaw changes. The mail ballot will be sent to the membership in the late spring of 1960.

POLICY AND PLANNING BOARD

KENNETH E. CLARK, *Chairman*
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PROPOSED AMENDMENTS¹ TO THE
BYLAWS² FOR
THE AMERICAN PSYCHOLOGICAL ASSOCIATION

ARTICLE I

Objects

1. The objects of the American Psychological Association shall be to advance psychology as a science [, as a profession,] and as a means of promoting human welfare *by the encouragement of psychology in all its branches in the broadest and most liberal manner; by the promotion of research in psychology and the improvement of research methods and conditions; by the improvement of the qualifications and usefulness of psychologists through high standards of professional ethics, conduct, education, and achievement; by the increase and diffusion of psychological knowledge through meetings, professional contacts, reports, papers, discussions, and publications; thereby to advance scientific interests and inquiry, and the application of research findings to the promotion of the public welfare.*³

¹ The material in brackets and smaller type is to be deleted from the present By-Laws by the proposed amendments. The material in italics is added by the proposed amendments. The material neither in smaller type nor in italics is retained unchanged from the present By-Laws.

² The word "By-Law" has been changed to the more current setting "Bylaw." Style changes of this nature are not identified in the manner described in Footnote 1.

³ This statement has been expanded to give a more accurate picture of the major APA activities. The word "profession" is deleted from the primary statement of the objectives of the Association because we are advised by legal counsel that before the law and before tax authorities the word "profession" has connotations closer to "business organization" than to "scientific organization." The removal of the word "profession" is based on an attempt to avoid misunderstanding and represents no basic change in policy of the Association. The APA is not a business organization and should not be perceived as such. The primary interest of the APA is in the advancement of psychology as a science and in the ensuing application of scientific methods and knowledge to problems of human welfare. The amendment does not imply that the scientific interests of psychologists are limited to laboratory or experimental research or to any stated areas of psychology nor that any areas of endeavor are to be placed in a subordinate role. Furthermore, Articles II and V continue to provide for election to membership and the organization of Divisions in terms of professional, as well as scientific, qualifications and interests. Under amended Article I,

ARTICLE II

Membership

1. The Association shall consist of three classes of members: Fellows, Members, and Associates.

2. Fellows shall be Members of the Association who are [primarily engaged] *interested*⁴ in the advancement of psychology as a science and as a profession and who [in addition to meeting the requirements for Membership in the Association,]⁵ have [been judged by the procedures] *met the standards* described below. [to have made an outstanding contribution to psychology as a science and a profession].⁶ Fellows shall be entitled to the rights and privileges of the Association without restriction.

3. The minimum standards for Fellow[ship] status shall be [1] (a) a doctoral degree based in part upon a psychological dissertation conferred by a graduate school of recognized standing, [2] (b) prior [membership] status as a Member for at least one year, (c) *active engagement at the time of nomination in the advancement of psychology in any of its aspects*, [3] (d) five years of acceptable professional experience subsequent to the granting of the doctoral degree, and [4] (e) evidence of unusual and outstanding contribution or performance in the field of psychology. [and (5) nomination by one of the Divisions of which he is a Member.⁶ The Council of Representatives shall have the power to however, it would be clear that the purpose of joining the Association or of organizing a Division does not include the promotion of any phase of psychology as a business enterprise or trade association.

⁴ The original wording suggested that a person who ceases to be primarily engaged in psychology—e.g., retires or accepts a position in administration—should lose his fellowship status. An appropriate amendment, inserted below, requires active engagement in psychology at the time of election.

⁵ This is an example of a number of minor amendments introduced for purposes of clarity, uniformity of style, or elimination of useless words or potentially conflicting provisions. No change of previous intent or current practices is involved; thus similar changes throughout these amendments are not explained in footnotes.

⁶ This is a case of deletion of a *redundancy* since the same provision appears elsewhere. Similar cases are referred to throughout these amendments by this same footnote number: 6.

designate further standards to be met in the election of Fellows. Divisions may require higher standards than those set by the Council of Representatives for the Association as a whole.⁷

4. Members of the Association shall be persons who are interested [or primarily engaged] in the advancement of psychology as a science and as a profession and who have met *the* standards [of proficiency as] described below. Such Members shall be entitled to the rights and privileges of the Association without restriction. The designation Member as used in these Bylaws [is] *shall be* deemed to include Fellows, except where there is an express provision [otherwise] *to the contrary*.

5. The minimum standard for election to Member status shall be the receipt of the doctoral degree based in part upon a psychological dissertation and conferred by a graduate school of recognized standing. [Application] *Candidates for Member[ship] status* shall [also include evidence that the applicant is] ⁸ *be* engaged in study or professional work that is primarily psychological in nature.

6. Associates shall be persons who are interested in the advancement of psychology as a science and as a profession and who [are either in training or employed in the field of psychology.] *have met the standards described below*. Associates may not vote or hold office in the Association, but shall be entitled to all rights and privileges of the Association not specifically denied them in these Bylaws.

7. The minimum standard for election [as an] *to Associate status* shall be [1] (a) completion of at least two years of graduate work in psychology in a recognized graduate school or [2] (b) the master's degree in psychology from a recognized graduate school plus a year of acceptable experience in professional work that is psychological in nature. [and

they shall, at the time of election,] *Candidates for Associate status shall be* devoting full time to professional or graduate work that is primarily psychological in nature.

8. Associates who [receive the doctor's degree, as described in Section 5 above,] *meet the standards for Member status* will, upon application, automatically be advanced to Member on the January first next following the date of [the receipt of the] application *for such advancement*.

9. Fellows shall be elected by the Council of Representatives upon recommendation by the Board of Directors. Nomination of a Fellow shall be made by a Division of which he is a Member. [and such nomination shall include evidence that the minimum standards of the Association have been met. The names of such nominees for Fellow status shall be published in the American Psychologist in advance of action by the Board of Directors.] ⁸ Members and Associates shall be elected by the Board of Directors upon recommendation of the Membership Committee of the Association.

10. *The Council of Representatives shall have the power to designate further standards to be met in the election of members.*⁹

[10] 11. The requirement of a doctoral degree based in part upon a psychological dissertation may be waived: [1] (a) for Fellow status, by the Council of Representatives upon submission of evidence satisfactory to the Council of outstanding contribution or performance in the field of psychology; or [2] (b) for Member status, by the Board of Directors upon submission of evidence satisfactory to the Board of significant contribution or performance in the field of psychology.

[11] 12. The requirements for election as a Member or Associate may be waived by the Board of Directors, in special cases, for persons of distinction in fields other than psychology.

[12] 13. In addition to the regular membership classes, there shall be a class of Foreign Affiliates, who are not members of the Association and who shall not represent themselves as such. [unless and until they have been elected to membership.] They shall have such rights and privileges as may be granted by the Council of Representatives, including special rates for journal subscriptions.

[13] 14. Foreign Affiliates shall be psychologists who reside in countries other than the United States

⁷ This is an example of a number of minor amendments consisting of deletion in one place and *reinsertion* elsewhere with more general effect or with improved order in the Bylaws. Similar cases throughout these amendments are referred to by this same footnote number: 7.

⁸ A number of changes, of which this is an example, have been proposed for the purpose of deleting administrative or procedural detail from the Bylaws. Such details will be covered in a formal set of Rules of Council, thereby eliminating the necessity of amending the Bylaws each time that a minor change is contemplated. Such *rules* may appropriately cover additional detail over and above that now being deleted from the Bylaws. The Rules of Council will be published and distributed to all members. Similar cases throughout these amendments are referred to by this same footnote number: 8.

⁹ E.g., ethical standards, introduced by means of endorsements on applications for membership.

or Canada. [who are not members of the American Psychological Association, but who desire affiliation. A Foreign Affiliate shall] *An individual desiring affiliation with the Association must, at the time of application,*¹⁰ be a member of the psychological association of the country in which he resides or, if no such association exists, shall present evidence of appropriate qualifications. Foreign psychologists who meet the standards for membership may apply in the usual manner if they so desire.

[14] 15. There shall be a Student Journal Group consisting of graduate or undergraduate students in psychology. They shall [be elected in accordance with rules prescribed by, and shall]⁸ have such privileges as may be granted by the Council of Representatives, including special rates for the Association's publications. They are not members of the Association and shall not represent themselves as such. [unless and until they have been elected to membership.]

[15] 16. Foreign Affiliates and participants in the Student Journal Group [are] *shall be* recognized by the Executive [Secretary] *Officer*¹¹ without election upon securing the necessary endorsements and the payment of fees.

[16.7 Divisions may establish such classes of membership within the Division as they see fit, except that the designation Fellow, or Member, or Associate shall be reserved for members of the division who are also members of the Association and elected respectively as Fellows, Members, or Associates, according to the provisions of Sections 3, 5, and 7 of this Article.]

[17.8 Procedure for application for membership, affiliation, or participation in the Student Journal Group, and for transfer from Member to Fellow, shall be prescribed by the Council of Representatives.]

[18] 17. A member may be dropped from membership for conduct which [in anywise] tends to injure the Association, or to affect adversely its reputation, or which is contrary to or destructive of its object. [Charges] *Allegations* of injurious conduct shall [not be entertained against a member unless the precise nature of the charges] be submitted to the Committee on Scientific and Professional Ethics and Conduct which shall have the power to conduct

*necessary investigation of the allegations and shall [to] determine whether the [charges] matter shall be dropped [whether the accused shall be given an opportunity to resign,] or whether [the] charges shall be referred with findings and recommendations to the Board of Directors for review and possible [recommendation to the Council of Representatives for] action.*¹² Conviction of a member for a felony involving moral turpitude automatically brings [this] *his* case [without necessity of formal complaints,] before the Committee on Scientific and Professional Ethics and Conduct; and he may be dropped from membership by the [Council of Representatives] *Board of Directors* without the necessity of a hearing. In other cases, *the Committee on Scientific and Professional Ethics and Conduct shall recommend action only after the member has been informed of the nature of the allegations standing against him and has had an opportunity for a hearing relating to those allegations. The Committee on Scientific and Professional Ethics and Conduct shall inform the member of any recommendations it makes to the Board of Directors. Within thirty days after the date on which the member is informed of the committee's recommendations, he has the right to request a review. If, during this thirty-day period, the accused does not request a further hearing, the Board of Directors shall have the authority to decide, by a three-fourths vote of the Directors present at a meeting, whether the accused shall be given an opportunity to resign or whether*

¹² It is the intent of the changes in Paragraphs 18 and 19 and in the old Article XI below that the Committee on Scientific and Professional Ethics and Conduct shall serve investigative and advisory functions only. The enforcement of ethical standards is assigned to the Board of Directors. The right of appeal to Council is abolished, but the procedure to be followed will permit separate hearings by two different bodies. Final action is to be in the hands of the Board of Directors, but the accused has a right of appeal to the special committee to be appointed by the President with the concurrence of the Board of Directors. The accused will no longer have the right of appeal to the Council of Representatives which, as a 100-man body, no longer appears to be an appropriate judicial agency. The Council, under the proposed amendments below, has the right to review the actions of all APA units on its own initiative and thus to control policy; but it could not change the action already taken by the Board of Directors against the accused. The changes recommended with respect to ethics cases are supported by the Board of Professional Affairs and the Committee on Scientific and Professional Ethics and Conduct.

¹⁰ An individual who ceases to be a member of a foreign psychological association should not be required to lose his status as a Foreign Affiliate.

¹¹ The Board of Directors and the Council of Representatives suggest that the title of the Executive Secretary be changed to Executive Officer consistent with the practice of sister associations.

he shall be dropped from membership. If, during this thirty-day period, the accused does request a further hearing, [in which the Board of Directors recommends that a member be dropped, and the member requests a hearing,] the President shall select, with the concurrence of the Board of Directors, [shall select] a panel of not fewer than ten [APA] Members from whom the accused member shall choose a Review Committee of seven to hear the member's answer to the formal charges against him. On recommendation of the [hearing] Review Committee, the [Council of Representatives] Board of Directors may drop [a] the member or permit him to resign by a three-fourths vote of the [Representatives] Directors present at the [Council] meeting which considers the matter. The Board of Directors shall inform the member of its final action, and it shall report annually and in executive session to the Council of Representatives the names of the members who have been allowed to resign or who have been dropped and the ethical principles involved. The Board of Directors shall report annually and in confidence to the membership the names of members who have been dropped and the ethical principles involved.¹³

[19] 18. A person who has been dropped from membership or permitted to resign under the conditions [for conduct as] described in Section 17 may reapply for membership only after five years have elapsed from the date of the termination of his [expulsion] membership and upon showing that he is ethically as well as technically qualified for membership. His reapplication shall be considered first by the Committee on Scientific and Professional Ethics and Conduct, which shall make recommendation to the Membership Committee. [determine whether or not there now exists sufficient evidence of ethical scientific and professional conduct to warrant further processing of the application in the usual manner. Except as limited by the above, any person who has resigned from the Association may reapply at any time, but all such reapplications shall be referred to the Committee on Scientific and Professional Ethics and Conduct to determine whether or not there is relevant information in the Committee files.]⁸

[20] 19. [Any member who wishes to resign his membership in the Association shall communicate this fact to the Central Office.]⁸ Resignations of members may be accepted only by the Board of Directors.

¹³ The Board of Directors does not now and should not report to the membership the name of a member who has been allowed to resign.

ARTICLE III

Power and Functions of the Council of Representatives

1. There shall be a Council of Representatives which shall be the legislative body of the Association and shall have full power and authority over the affairs and funds of the Association within the limitations set by the *Certificate of Incorporation* and¹⁴ these Bylaws, including the power to review, upon its own initiative, the actions of any board, committee, Division, or affiliated organization.¹⁵ [It shall have the authority to elect members and to drop members. It shall have the power to provide for the making of such contracts and the delivery of such deeds, documents and instruments as shall be necessary for the carrying out of all the purposes, functions and business of the Association as provided by these By-Laws. It shall decide all questions involving cooperation with other national organizations and may make such changes in policy or administration as it deems advisable, consistent with these By-Laws. It may recommend amendments to the By-Laws. It shall have the authority to delegate powers and responsibilities to the Board of Directors, the Publications Board, and the Policy and Planning Board.]

[2.7 The Council of Representatives shall be composed of the Division Representatives, Special Representatives, Representatives of State Psychological Associations and the officers of the Association. In the event there is no Representative of a given division present, the Council of Representatives will seat one

¹⁴ The Certificate of Incorporation is of higher authority than the Bylaws.

¹⁵ The right to review provides the basis for approval and disapproval and thus to set policy for the future. It cannot change an action taken when the action is already accomplished—e.g., a contract, the dropping of a member, etc. Except for the specifics stated in other Bylaws, Council will have full power by adoption of Rules of Council to determine what action it will take itself and what action it will delegate. The only other changes contemplated in the amendments to this Article are with respect to ethics as indicated above and to the emergency interim powers of the Board of Directors. For emergency situations, the requirement is deleted below that the Board secure the consent of Council that an emergency exists before taking action. Securing the votes of two-thirds of a Council of roughly 100 members may be impossible, and it may even be difficult to determine whether it is possible in time to meet an emergency. The Board or 15% of the Council members may call a special Council meeting on a 15-day notice should a question of policy arise. The items deleted from this section will remain as powers of Council; they are deleted because any stated power may raise questions about an unstated power which Council may need to have.

person designated as an Alternate Representative by the officers or executive committee of that Division. The President of the Association shall preside at the meetings of the Council of Representatives and, in his absence or disability, the President-Elect shall preside. Representatives shall hold office until their successors are elected and qualify. However, a Representative who has been elected to the Board of Directors shall continue to be a member of the Council of Representatives after the expiration of his term as Representative, and after the election and qualification of his successor as Division Representative, until the expiration of his term as a member of the Board of Directors.]

[3] 2. [Regular] *Annual* business meetings of the Council of Representatives shall be held at the time and place of the Annual Convention. [the time and place of meeting to be decided by vote of the Council of Representatives.]⁶ Special meetings may be called by vote of the Board of Directors and shall be called upon the written request of [ten members] *fifteen percent of the membership* of the Council of Representatives. Notices of meetings, in writing, for every annual or special meeting of the Council of Representatives shall be prepared and mailed to the last known post office address of each Representative not less than fifteen days before any such meetings; and, if for a special meeting, such notices shall state the object or objects thereof, and no business shall be transacted except that stated in the notice for said special meeting.

3. The Council of Representatives shall publish its minutes and proceedings. [in the American Psychologist.⁸ On important matters of policy,] If one-fourth of the Representatives present so request, the minutes shall include a record of those Representatives voting for and against a motion. [Members of the Association may attend any] Meetings of the Council of Representatives, except those specifically designated as executive sessions, *shall be open to members*¹⁰ *of the Association, but they* [but] may not speak or otherwise participate in the meeting unless specifically invited to do so by the President.

4. Upon petition of [100] *one hundred Members* in good standing at the time of the petition's filing with the Recording Secretary or upon vote of any

¹⁰ The changes in this and lower paragraphs from "member" to "Member" and vice versa are intended to implement the philosophy of previous Bylaw amendments which placed the responsibility for the affairs of the Association in the hands of the Members (the term Member includes Fellows except as specifically stated in the Bylaws to the contrary).

Division or State Association,¹⁷ any matter of legislation may be brought to the attention of the Council of Representatives, which shall vote upon it at its next [regular] *Annual Meeting*.

5. Upon petition of [200] *two hundred Members* in good standing, [at the time of the petition's filing with the Recording Secretary] a request for a mail vote of the Members of the Association upon [a question of policy or legislation—either concerning a past action to be recalled or a new action to be initiated,] *any matter*, but not involving an amendment to the Bylaws, may be addressed to the Council of Representatives, which shall present the matter covered by the petition, if it is not inconsistent with the *Certificate of Incorporation or these Bylaws*, to the Members of the Association for a mail vote. [on an appropriate ballot which shall present the legislation proposed and which may contain arguments for and against the legislation. The results of such a vote shall be counted by the Election Committee. When the Election Committee certifies the result to the Council of Representatives, the latter shall, if there is a majority of those voting in favor, make the legislation operative. (For Amendments to the Bylaws, see Article XX.)]⁸ *The Council of Representatives shall take such action as may be necessary to implement the result of any such vote.*

6. A majority of the members of the Council of Representatives shall constitute a quorum. Unless otherwise specified in these Bylaws, decisions shall be by a majority of those voting.

7. The Council of Representatives shall be authorized to adopt and publish rules and codes for the transaction of [its] *the business of the Association*, provided the same do not conflict with these Bylaws.

ARTICLE IV¹⁸

[Divisions]

Composition of the Council of Representatives

[2] 1. The Council of Representatives shall be composed of the *Representatives of Divisions*, [Rep-

¹⁷ In this and a number of other changes below, prior amendments giving State Associations the right to Council representation are implemented. In general, the changes are intended to treat State Associations as Divisions are treated. However, the State Associations, being affiliated only and not legally subject to Council action, are given only one Council Representative each; whereas Divisions, being integral parts of the Association, are given a form of proportional representation such that the total vote of Divisions taken together exceeds the total vote of State Associations taken together: in this respect no change in the effect of the present Bylaws is proposed.

¹⁸ This is a new Article, based on parts of old Articles III, IV, and XIII.

representatives, Special Representatives,]¹⁹ Representatives of State Psychological Associations, *members of the Board of Directors*, and the officers of the Association. In the event there is no Representative of a given Division or State Association present, the Council of Representatives will seat one [person designated] *Member* as an Alternate Representative, *provided such Member is an officer of or has been designated in advance*²⁰ by [the officers or executive committee of] that Division or State Association. The President of the Association shall preside at the meetings of the Council of Representatives and, in his absence or disability, the President-elect shall preside. Representatives shall hold office until their successors are elected and qualify, *except that* [However,] a Representative who has been elected to the Board of Directors shall continue to be a member of the Council of Representatives after the expiration of his term as Representative, and after the election and qualification of his successor as Division or State Association Representative, until the expiration of his term as a member of the Board of Directors.

[3] 2. The number of Representatives which any one Division shall have on the Council of Representatives shall be determined annually in accordance with the [number of members within the Division who are members of the Association.] *proportion of the total number of Members of the Association who are members of the Division.*²¹ Total representation

¹⁹ The provision for Special Representatives was inserted in the Bylaws in 1944 to meet a special situation which no longer exists. Granting Council representation to an organization creates ties which are difficult of legal definition. Such a grant should be made only on the basis of an ad hoc Bylaw, such as that for the State Associations, which defines the ties more precisely than the old Article V, Special Representatives. It is proposed below to delete the old Article V.

²⁰ Details for Rules of Council will be set by Council. The intent of this amendment is to increase the continuity and orderliness of Council representation and to insure that no question of the legality of representation can arise.

²¹ In order to keep Council from becoming too large a body for effective discussion, and to reduce the need for frequent changes in the formula, a relative rather than an absolute formula for determining divisional representation is introduced. In 1959, the total divisional representation was 66. Under the above formula it would have been 57; nine Divisions would have lost one Representative each. Total state representation is expected to be above 30 in 1959. The Policy and Planning Board regards a Council size of about 100 as the upper limit for effective discussion and will propose that Council adopt a rule calling for the Policy and Planning Board to initiate redistribution and

shall be determined annually by the [following graduated] formula:

[Members of the Divisions who are Members of the Association]	[increment]	[Number of Representatives on the Council]
[300 or less		[2
301 to 500	[200	3
501 to 800	300	4
801 to 1200	400	5
1201 to 1700	500	6
1701 to 2300]	600]	7]

<i>Proportion of the Members of the Association who are members of the Division</i>	Number of Representatives on the Council
<i>Less than 1%</i>	1
<i>1% to 1.99%</i>	2
<i>2% to 3.99%</i>	3
<i>4% to 6.99%</i>	4
<i>7% to 10.99%</i>	5
<i>11% to 15.99%</i>	6

[etc., at the same rate of increase.] *and with successively larger increments at the same rate of increase for each additional Representative.*

3. *Council Representatives of a Division shall be members of the Division and Members of the Association and shall be elected for staggered terms of three years each by those members of the Division who are also Members of the Association.*

[5] 4. Each State Psychological Association having [100] *one hundred* or more members who are *Members of the American Psychological Association* shall be entitled to elect a Representative to the Council of Representatives. Such Representatives shall be members of the State Association and *Members of the American Psychological Association* and shall be elected for a term of three years by those members of the State Association who are also *Members of the American Psychological Association*. [A Representative who has served for three years shall not be eligible for immediate re-election.]²

[6] 5. Any group of State Psychological Associations not qualified under the preceding section to elect a Representative may, by mutual agreement, associate themselves in order to elect one Representative provided that their combined membership includes [100] *one hundred* or more *Members of the American Psychological Association* and provided

reduction of Council size to about 85 when its membership reaches 115.

further that the terms of their agreement, including provisions for its termination, are set forth in writing to the officers of the American Psychological Association. In all other respects, such joint Representatives are referred to and shall be governed by these Bylaws as if they were Representatives of a single State Association.

6. A Representative of a Division or State Association who has served for three years shall not be eligible for immediate re-election by that Division or State Association.

ARTICLE [IV] V

Divisions

1. Divisions may be organized to represent major scientific and professional interests that lie within the Association.

[2. ⁷Representatives of a Division shall be members of the Division and of the Association and shall be elected for staggered terms of three years each by those members of the Division who are also members of the Association. No division shall renominate its Council Representatives after three years on the Council without at least one year intervening.]

[3. ⁷The number of Representatives which any one Division shall have on the Council of Representatives shall be determined annually in accordance with the number of members within the Division who are members of the Association. Total representation shall be determined annually by the following graduated formula:]

[Members of the Divisions who are Members of the Association]	[increment]	[Number of Representatives on the Council]
[300 or less		[2
301 to 500	[200	3
501 to 800	300	4
801 to 1200	400	5
1201 to 1700	500	6
1701 to 2300]	600]	7]

[4] 2. Any member of the Association may apply for membership in one or more Divisions under the rules of eligibility and election established by the Division. Associates or Members may remain Associates or Members without divisional affiliation. A Division may include in its membership those who do not qualify for or do not desire membership in the Association. *It may determine its own qualifications for its membership classes, provided that the designation Fellow, or Member, or Associate shall be reserved for members of the Division who*

*are at least Fellows, Members, or Associates, respectively, of the Association.*²²

[5] 3. A Division shall be [set up whenever one hundred or more] *established whenever one percent or more of the*²³ Members of the Association petition for it and the Council of Representatives approves. A two-thirds vote of those present at any Annual [business] Meeting of the Council of Representatives is required for the establishment of a new Division. The Council of Representatives may create such Divisions provided [1] that (a) they represent [the emergence of] an active and functionally unitary interest of a group of Members, [(2) that the] (b) *their proposed* objectives fall within the scope of those specified in Article I, [(3) that the] (c) *their* membership is not restricted on any basis other than psychological interests and qualifications, and [(4) that] (d) the establishment of [the] *any new* Division is not inimical to the welfare of any other Division already established. Divisions when formed from existing societies or organized as new societies may use a society name, provided they append to it the phrase: "A Division of the American Psychological Association."

[6] 4. A Division [may] *shall* be dissolved by the Council of Representatives [1] when (a) the number of Members within the Division falls below one hundred or [(2) when] (b) the Division votes to recommend dissolution. The Council of Representatives may also dissolve a Division for good and sufficient reason by a two-thirds vote of those present at an Annual Meeting, provided that the reason for dissolution is stated in writing by the Council of Representatives to the membership of the Division and [provided] that the Division membership has been given full opportunity to state the reasons for the continued existence of the Division.

[7] 5. A Division remains autonomous in all matters within its field that are not reserved to the Association and the Council of Representatives by

²² Regularizes current practice of some Divisions.

²³ Each division produces overhead so that it is desirable not to make it too easy to establish a new division. On the other hand, it is desirable to recognize major interests by granting divisional status. As a compromise, the figure of 1% of the Members was chosen. However, since disestablishment of a division is regarded as a more serious matter than difficulty in establishment of a division, the figure for disestablishment is left unchanged below from the present absolute number of 100 Members. The requirement for disestablishment is made mandatory, however, rather than permissive.

these Bylaws. [It may determine its own qualifications for its membership classes, provided that they are not inconsistent with the provisions of Article II, Section 16 and Article IV, Section 5, and] ⁷ It may determine what persons among its membership shall have the right to vote in divisional matters.

[8] 6. A Division shall have a President and a Secretary, and such other officers as it may desire. The qualifications for its officers and the method of their election shall be determined by the Division.

[9] 7. Each Division shall draw up *and maintain* its own Bylaws and rules of procedure within the framework of these Bylaws. [and not inconsistent with these By-Laws.] Each Division may elect such officers, appoint such committees, and adopt such regulations for the conduct of its business as it may desire, except that its committee structure is subject to review by the Board of Directors of the Association. A committee proposed by a Division which is more properly a committee of the Association may become a [special] committee of the Association on recommendation of the Board of Directors. Each Division shall file with the [Recording Secretary of the Association] *Central Office* a copy of its *current* Bylaws, [and] regulations, *and committee structure*.

[10] 8. A Division may administer a journal or special funds allocated to its use, but may delegate such administrative functions to the Council of Representatives or to the Central Office.

[ARTICLE V] ²⁴

[Special Representatives]

[1. The Council of Representatives may at its discretion authorize special representation of groups not qualifying as Divisions of the Association, but with reason to be represented by virtue of relation to the stated objectives of the Association, except that there shall not at any one time be more than three such groups, that no such group shall have more than one Representative, and that no group shall have such representation for more than three successive years. Such a Special Representative shall be elected annually by members of the group authorized by the Council of Representatives. Special Representatives and those who elect them must be members of the Association.]

ARTICLE VI

Board of Directors

1. The Board of Directors shall consist of the President, the President-elect, the Past President,

²⁴ See new Article IV.

the Recording Secretary, the Treasurer, the Executive [Secretary] *Officer* (without vote), all serving ex officio, and six others elected by a preferential ballot by the Council of Representatives from among its own members. Directors not serving ex officio shall serve for staggered terms of three years. [and their terms of service on the Board of Directors may outlast their membership in the Council of Representatives.] ⁶ All members of the Board of Directors shall serve until their successors are elected and qualify.

2. Regular meetings of the Board of Directors shall be held semiannually: one just prior to the Annual [business] Meeting of the Council of Representatives, the other, approximately six months later, at a time and place to be specified by a vote of the Board of Directors. Special meetings of the Board of Directors may be held at any time on the call of the President or the Recording Secretary. A quorum at any meeting shall consist of a majority of the entire membership of the Board of Directors.

3. In the case of disability or resignation of a Director, the Council of Representatives may fill the vacancy for the unexpired term.

4. The Board of Directors shall be the administrative agent of the Council of Representatives, *shall supervise the work of the Executive Officer of the Association*,²⁵ and shall exercise general supervision over the affairs of the Association. [It shall recommend the election of new Fellows, shall elect new Members and Associates, and shall make recommendations concerning the administration of the Association to the Council of Representatives. It shall transact all business referred to it by the Council of Representatives, provided however, that the action of the Board shall not conflict with recorded votes of the Council of Representatives or these By-Laws. The Board of Directors shall supervise the work of the employees of the Association.] In the interval between the Annual [business] Meetings of the Council of Representatives, the Board of Directors shall have authority [over the affairs of the Association and shall] *to take such actions as are necessary for the conduct of the Association's affairs* [except that no action shall be taken which is contrary to an action taken by the Council of Representatives at its annual business meeting or which is inconsistent with these By-Laws.] ⁶

²⁵ A previous provision, deleted below, required the Board to supervise the work of all employees of the Association. It is desirable that all employees report to the Executive Officer as the administrative officer of the Association under the Board of Directors and Director of the Central Office. This is present practice and should be regularized.

in accordance with these Bylaws and the policies of the Council of Representatives. If an emergency is declared by a majority of the Board of Directors, the Board shall have power to take action as though such action were taken by Council. The Board of Directors shall make a report of its transactions at each [regular] Annual Meeting of the Council of Representatives.

[5.²⁶ If an emergency arises between Annual Meetings of the Council of Representatives, the Board of Directors shall have the power to change plans for meetings and to take other actions not authorized in Section 4 of this Article, provided, however, that no action shall be taken under this emergency clause until an affirmative vote of two-thirds of the members of the Council of Representatives declaring that an emergency exists be secured by mail ballot. For such emergency action, the Board of Directors shall, when possible, secure a mail vote of the Council of Representatives. All actions so taken shall be recorded at the next meeting of the Council of Representatives. Nothing in this section shall be construed as delegating to the Board of Directors power to amend these By-Laws.]

[6.⁷ The President of the Association shall be Chairman of the Board of Directors, and the Recording Secretary of the Association shall be the Recording Secretary of the Board of Directors. Other persons may be invited to sit with the Board of Directors on appropriate occasions but shall have no vote.]

ARTICLE VII

Officers

1. The officers of the Association shall be as follows: a President, a President-elect, a Past President, a Recording Secretary, a Treasurer, and an Executive [Secretary] *Officer*. They shall hold office until their successors are elected and qualify.

2. The President shall be a Member of the Association who has just completed his term as President-elect. The President-elect shall become President by declaration of the Council of Representatives at the close of the Annual Meeting one year after announcement of his election as President-elect. During his term of office the President shall serve as (a) the [general] presiding officer of the Association, (b) chairman of [all meetings of] the Council of Representatives, (c) chairman of the Board of Directors. He shall perform such other duties as are *prescribed in these Bylaws*, are incident to his office, or as may properly be required of him by

vote of the Council of Representatives or of the Board of Directors.

3. The President-elect shall be a Member of the Association, elected by preferential mail ballot by the Members of the Association following primary nomination by mail ballot. He shall take office as President-elect at the close of the Annual Meeting at which his election is announced. During his term of office as President-elect he shall serve as [(a) a member of the Council of Representatives and of the Board of Directors, and (b)] ^a *presiding officer of the Association in the absence of the President and as the vice-chairman of the Council of Representatives and of the Board of Directors and shall perform such other duties as may be prescribed in these Bylaws.*

4. In the event that the President shall not serve out his full term for any reason, the President-elect shall succeed to the unexpired remainder thereof and continue through his own term. In the event that the President-elect shall not be able to serve out his term, both a President and a President-elect shall be nominated and elected at the time of the next election *and shall assume office by declaration of the Council of Representatives at the close of the Annual Meeting following election.* [The duties of the President-Elect shall be those of a vice-president.]

5. *In the event that both the President and the President-elect shall be unable to serve, the Board of Directors shall elect one of its members to serve as presiding officer of the Association.*²⁷

[4] 6. The Past President shall be the most recently retired President. [and shall serve as a member of the Council of Representatives and of the Board of Directors.]⁶

[5] 7. The Recording Secretary shall be a Member of the Association, elected by the Council of Representatives following nomination by the Board of Directors. He shall serve for a term of three years, beginning at the close of the Annual [business] Meeting at which his election is announced, and shall not succeed himself more than once in this office. During his term of office he shall serve as [(a) a member and] ^a secretary of the Council of Representatives and [(b) a member and secretary] of the Board of Directors *and shall perform such other duties as may be prescribed in these Bylaws.* It shall be the duty of the Recording Secretary to keep the records of all meetings of the Council of

²⁶ See Footnote 15.

²⁷ Succession to office should be defined.

Representatives and of the Board of Directors; [in due form as prescribed by law; to have charge of the seal and corporate books;] to file and hold subject to call and to direct the publication of such records, reports, and proceedings as are authorized by these Bylaws and by vote of the Council of Representatives or the Board of Directors at any duly constituted meeting; [to bring to the attention of the Council of Representatives and the Board of Directors such matters as he deems necessary; to conduct the official correspondence of the Association; to have custody of the bonds which are required to be filed by the Treasurer and such other fiduciary employees as shall be required by the Board of Directors to file a bond, holding these bonds subject to the order and direction of the Board of Directors; to issue calls and notices of meetings; to sign such checks or other drafts upon the funds of the Association as may be necessary;]²⁸ and to perform all other secretarial duties for the Council of Representatives and the Board of Directors as are not delegated to the Executive [Secretary] Officer. In case of the death or incapacity of the Treasurer, the Recording Secretary is [hereby] authorized to [sign checks or drafts and to] perform the [other] duties normally assigned to the Treasurer. [In the absence of any specific provision of these By-Laws to the contrary, the Recording Secretary shall have power and authority to represent the Association in the voting or other management of any stock held by the Association in any other corporation or company; and in the event that the performance of such acts by the Recording Secretary becomes impossible or inadvisable by virtue of law or otherwise, the Recording Secretary shall have the power to appoint any member of the Association to act as duly authorized agent of the Association for the performance of said acts.]

[6] 8. The Treasurer of the Association shall be a Member of the Association, elected by the Council of Representatives following nomination by the Board of Directors. The Treasurer shall take office for a term of five years, beginning at the end of the fiscal year during which his election is announced, and shall not succeed himself more than once in this office. During his term of office he shall serve as [(a)] senior [fiscal] *financial* officer of the Association [(b) member and fiscal officer of the Council of Representatives and of the Board of Directors, (c) fiscal representative of the members of the Association to the Central Office,] and [(d) a member of the

Publications Board.] *shall perform such other duties as may be prescribed in these Bylaws.* [It shall be the duty of the Treasurer to have custody of all funds, deeds, stocks, securities including those of the Association's publications and to deposit the same in the name of this Association in such bank or banks as the Council of Representatives or the Board of Directors may direct; to have custody of all other property of the Association not otherwise expressly provided for by these By-Laws and to hold the same subject to the order and direction of the Council of Representatives; to collect dues and subscriptions and other debts due the Association by all persons whatsoever; and to execute, seal or deliver any contracts, deeds, instruments or other documents which he shall be directed to execute, seal or deliver on behalf of the Association by the By-Laws, vote of the Council of Representatives or the Board of Directors.] He shall have authority to sign checks and drafts on behalf of the Association for the disbursement of funds for duly authorized purposes of the Association as provided by the Bylaws *or by vote of the Council of Representatives or the Board of Directors.* [He shall be bonded by an amount fixed by the Board of Directors, the bond to be filed with the Recording Secretary of the Association. He shall, at all reasonable times, exhibit his books and accounts to any member of the Association. He shall keep a full and complete record of all money received and all money paid out, and shall perform such other duties as reasonably may be required of him by vote of the Council of Representatives or the Board of Directors at a duly constituted meeting. The Treasurer] *He shall deliver an audited report for each fiscal year to the Finance Committee and the Board of Directors.*

[7] 9. The Board of Directors shall nominate a Member of the Association to the Council of Representatives for election as Executive [Secretary] Officer who shall be the administrative officer of the Association and *Director of the Central Office.* *He shall perform such duties as may be assigned to him by the Board of Directors and the Council of Representatives or as may be prescribed in these Bylaws.* Election of the Executive [Secretary] Officer shall be by a two-thirds vote of those Council members voting. He shall be elected for a term not to exceed five years and may be re-elected. During his term as Executive [Secretary] Officer he shall not hold any other office within the Association or any of its Divisions *or State Associations.* [He shall be bonded by an amount fixed by the Board of Directors, the bond to be filed with the Recording Secretary of the Association.]

²⁸ Changes here and below in duties of officers are intended only to regularize present practices or to delete matters more properly covered by Rules of Council than by Bylaws.

10. Any officer [He]²⁹ may be removed from office before the expiration of his term by a two-thirds vote of those present at a meeting of the Council of Representatives if it appears that the best interest of the Association is not being served.

11. The officers of the Association shall be bonded by an amount fixed by the Board of Directors.

ARTICLE VIII

Corporate Seal

1. The corporate seal of the Association shall be

SEAL

ARTICLE IX

Nominations and Elections

1. At least six months before the Annual Convention the Election Committee shall issue a call by mail to all Members of the Association for nominations for the office of President-elect. The nomination ballots shall provide spaces for at least three names to be listed in order of preference. [2] Thirty days after mailing the nomination ballots the Election Committee shall close nominations and shall make a preferential count of nominees for President-elect. The Election Committee shall then prepare for the final election ballot a slate including the names of the five persons who received the largest numbers of nominating votes. [The Election Committee shall secure from each Division the names of two or more nominees for each Representative to be elected by that Division to the Council of Representatives.]

[4] 2. Not longer than two months after closing the nominating ballot, the Election Committee shall mail to all Members of the Association the final ballot which shall include the nominees for President-elect, [the nominees for Division Representatives to the Council of Representatives,] and may include [at the request of any Division, the nominees for officers of that Division.] *the names of nominees for such other offices as may be appropriate.*

3. No person shall be eligible to represent more than one organization in Council at any one time.

[3] 4. [It shall be the duty of] The Election Committee [to] shall determine the eligibility of nominees and [to] ascertain that all the nominees for

any office are willing to stand for office. [No person shall be eligible to serve at any one time in more than one position as Representative to the Council of Representatives.]⁷ If any nominee is found to be ineligible or unwilling to stand for office, the name of the person ranking next on the preferential count shall be substituted.

5. The Election Committee shall secure from each State Psychological Association the name of its elected Council Representative and shall determine eligibility.

[5.] 6. Thirty days after mailing the final ballot, the Election Committee shall close the election and shall make a preferential count of the election ballot. Tie votes shall be resolved by [drawing] lot.[s.] The Election Committee shall also secure reports from the [Secretaries of] Divisions and from the [Secretary of the Conference of State Psychological] State Associations of the results of all elections conducted by them. The election results shall be reported by the Election Committee to the Board of Directors at least one month prior to the Annual Meeting of the Council of Representatives.

[6] 7. Announcement of elections shall be made by the Board of Directors at the Annual Meeting of the Council and at the Annual Convention. [at the session on Report of the Council of Representatives.]

[ARTICLE X]⁷

[Policy and Planning Board]

[1. The Council of Representatives shall elect, not necessarily from its own members, a Policy and Planning Board consisting of nine members of the Association, three of whom shall be elected each year, and each of whom shall serve for a term of three years. The Policy and Planning Board shall be selected to represent the range of active interests within the Association. In the event of the incapacity or resignation of a member of this Board, the Council shall fill the vacancy for the unexpired term. No person is eligible for immediate reelection after serving a full term.]

[2. The Policy and Planning Board's function shall be the consideration of current and long-range policy. As a continuing body, it shall recommend to the Council of Representatives such changes in existing policy and such extensions or restrictions of the functions of the Association or its Divisions as are consonant with the purposes of the Association. The Policy and Planning Board shall report annually in writing to the Council of Representatives and by publication in the American Psychologist to the entire membership, and it may make recommendations ad interim in writing to the Board of Directors and by publication to the membership.]

²⁹ Provision for removal from office is generally desirable.

[3. The Policy and Planning Board shall elect a Chairman annually from its own membership.]

[4. The Policy and Planning Board shall meet at least once each year at the call of its Chairman.]

[5. The Policy and Planning Board shall review the structure and function of the Association as a whole in 1950 and in every fifth year thereafter and shall make recommendations by written report to the Council of Representatives and by publication to the Association.]

ARTICLE [XI] X

Boards and Committees

1. The *boards and committees* of the Association shall consist of [such] *the standing boards and committees* [as may be] provided by these Bylaws and such [special] *other boards and committees* as may be established [by vote of] *in accordance with the rules of the Council of Representatives*. [or of the Board of Directors.] Members of standing *boards and committees*, except those serving *ex officio or as otherwise stated in these Bylaws*, shall be elected for staggered terms by the Council of Representatives. The Board of Directors shall nominate at least two persons for each position, and additional nominations may be made by members of the Council of Representatives. [The chairman of each committee.] Except as otherwise provided *in these Bylaws, each standing board and committee shall annually elect its own Chairman*.³⁰ [shall be designated annually by the Council of Representatives on nomination by the Board of Directors.] *Standing boards and committees shall meet not less often than annually at the call of their Chairmen*. [7. All committees] *They shall report annually in writing to the Board of Directors and the Council of Representatives*.

2. The Membership Committee shall consist of *not less than*³¹ three [Members] *Fellows*³² of the Association, [who may or may not be members of the Council of Representatives,] elected for terms of *not less than three years*, [and] who [sitting with the Executive Secretary who has no vote,] shall review applications for Fellow, Member, or Associate status and shall report its recommendations on each case to the Board of Directors.

³⁰ Regularizes current practice.

³¹ For committees directly concerned with operations, flexibility with respect to size and term is desirable.

³² It seemed wise, in this one instance, to limit service on a committee to Fellows, since nominations for Fellow status should be reviewed by Fellows.

3. The Finance Committee shall consist of the Treasurer and *not less than three Members of the Association*, elected for terms of *not less than three years*. The Treasurer shall serve as Chairman. It shall be the duty of the Finance Committee to present an annual budget, *to review the annual financial statements of the Association*, to supervise investments, and to nominate the professional auditors who shall be elected annually by the [Council of Representatives] *Board of Directors*.

4. The Convention [Program] Committee shall consist of *not less than three Members of the Association*, elected for terms of *not less than three years*. The President may each year appoint to this committee one or more Members of the Association *for a one-year term*. [from the area or place at which the Annual Convention is to be held.] It shall be the duty of the committee *to recommend policies and procedures to be followed in planning the Annual Convention*, [in conjunction with the Central Office] to coordinate the [Division] programs [and] *of Divisions and other organized groups within the Association, and to arrange for [general scientific] programs of general interest* at the time of the Annual Convention.³³

5. The Committee on Scientific and Professional Ethics and Conduct shall consist of *not less than six [five] Members of the Association*, elected from different [parts of the country] *geographical areas* for terms of *not less than three*³⁴ [five] years. It shall be the duty of this committee to receive and investigate complaints of unethical conduct of Fellows, Members, Associates, and Affiliates; to endeavor to settle cases privately; to report [annually to the Council of Representatives]⁶ on types of cases investigated with specific description of difficult or recalcitrant cases; to recommend [dropping from membership, as provided in Article II, Section 18;] *action on ethical cases investigated*; and to formulate [from time to time] rules or principles of ethics for adoption by the Association. The work of this committee, including information and recommenda-

³³ The Convention Policy Committee proposed that a Board of Convention Affairs be established, embracing the present functions of the Convention Policy Committee and the Convention Program Committee. The proposed By-law change provides a single committee to perform these functions.

³⁴ The Committee on Scientific and Professional Ethics and Conduct has requested that it be enlarged to not less than six members serving three-year terms because its work load is so great.

tion on all cases before it, shall be kept confidential except that it shall cooperate in exchanging [pertinent information needed in the work of the Membership Committee and the American Board of Examiners in Professional Psychology] *such information requested by the committees and the Divisions of the Association, the American Board of Examiners in Professional Psychology, the American Board for Psychological Services, the ethics committees of the affiliated Regional and State Associations, and licensing and certification boards, as the committee shall deem necessary to maintain ethical practice by psychologists at the highest professional level.*³⁵

6. The Election Committee shall consist of the Past President, acting as Chairman, and the two other most recently retired Presidents of the Association. The Election Committee shall be responsible for the conduct of elections *by the Members of the Association, shall determine the results of all such elections, and shall certify the outcome of elections to the Board of Directors and the Council of Representatives.* [and the counting of mail ballots, as provided in Articles III, IX, and XX.]

[1] 7.³⁶ [The Council of Representatives shall elect, not necessarily from its own members, a] *The Policy and Planning Board shall consist[ing] of nine Mem-*

³⁵ The risk of legal action against the Association is inevitably increased by any increased freedom to communicate; but, in the judgment of the Policy and Planning Board, the Board of Professional Affairs, and the Committee on Scientific and Professional Ethics and Conduct, the expected gains from cooperation with affiliates and the various certifying and licensing boards warrant the increased risk. The risks can be minimized by formulating definite rules and procedures for the various activities of the committee and, particularly, rules covering communication. Such rules are being formulated. Pending their adoption, the Council has directed that the increased communication authorized above take only the forms: "Individual A has been charged with violation of Ethical Principle B. His case is under investigation" or "Individual A was dropped from membership in the APA on [date] for violation of Ethical Principle B."

³⁶ Paragraphs 7, 8, and 9 have been inserted here from other Articles of the Bylaws, so that all boards and committees specified in the Bylaws appear in one place. In addition, the Education and Training Board, the Board of Professional Affairs, and the Board of Scientific Affairs are now established and continuing bodies of the Association. They have been assigned particular roles in relation to those special committees of the Association which fall within their scopes. Therefore, they should be *standing* boards of the Association, and Paragraphs 10, 11, and 12 have been added to establish them as such.

bers of the Association, three of whom shall be elected each year, and each of whom shall serve for a term of three years.³⁷ The Policy and Planning Board shall be selected to represent the range of active interests within the Association. [In the event of the incapacity or resignation of a member of this Board, the Council shall fill the vacancy for the unexpired term.] No person [is] *shall be* eligible for immediate re-election after serving a full term. [2] The Policy and Planning Board's function shall be the consideration of current and long-range policy. As a continuing body, it shall recommend to the *members, Board of Directors, and Council of Representatives* such changes in existing policy and such extensions or restrictions of the functions of the Association, [or] its Divisions, *or State Associations* as are consonant with the purposes of the Association. The Policy and Planning Board shall report annually [in writing to the Council of Representatives and] by publication [in the American Psychologist]³⁸ to the [entire] membership. [and it may make recommendations ad interim in writing to the Board of Directors and by publication to the membership.]

[3. The Policy and Planning Board shall elect a Chairman annually from its own membership.]

[4. The Policy and Planning Board shall meet at least once each year at the call of its Chairman.]

[5. The Policy and Planning Board] *It shall review the structure and function of the Association as a whole [in 1950 and] in every fifth year [thereafter] and shall make recommendations by written report to the Council of Representatives and by publication to the Association.*

[4] 8. [The Council of Representatives shall elect a] *The Publications Board [which] shall [include] consist of not less than three [members of the Council of] Editors of the journals of the Association*³⁸ *and not less than six Members of the Association who are not, at the time of election, Editors of Association journals and who are chosen to represent different interest areas of psychology. [These members of the Publications Board shall be nominated by the Board of Directors and] The noneditor members of the Publications Board shall serve for staggered*

³⁷ Since the Policy and Planning Board is responsible directly to the membership of the Association, the number of its members and their terms of office should remain in the hands of the membership, i.e., prescribed in the Bylaws.

³⁸ This change is consistent with the removal of Section 9, Article X, which removes the Council of Editors from the Bylaws. No change in its status or functions is intended.

terms of *not less than three years* [staggered so that one editor and two non-editors are elected each year.]³⁸ In addition, the Treasurer and the Executive [Secretary] *Officer* shall be ex officio members of the Publications Board. [The Chairman of the Publications Board shall be elected annually by the Council of Representatives upon nomination by the Board of Directors.] It shall be the function of the Publications Board to make recommendations [to the Council of Representatives through the Board of Directors] on publication plans and policies, including recommendations on the management, [of publications, on the] acquisition, initiation, or discontinuance of publications. [and on the nomination of] *It shall appoint* Editors, except the Editor of the [American Psychologist] *official organ of the Association*. [The Publications Board shall meet at least once each year prior to the annual business meeting of the Council of Representatives. At this meeting the reports from the Council of Editors and the Executive Secretary shall be reviewed, recommendations with regard to the management of the publications prepared, and nominations for editorships made. At its discretion the Publications Board may invite representatives of any of the publications of the Association or of the Divisions of the Association to be present to consider common problems.]³⁹

[5.³⁹ The Council of Editors shall consist of the editors of all the journals of the Association. It shall be the duty of the Council of Editors to outline general editorial policy, and to supervise the editorial conduct of the journals. The Council of Editors shall select its chairman annually. It shall have power to draw up rules and regulations for the conduct of its own meetings, for the guidance of editors, for the selection of assistant and associate editors, and for the submission of manuscripts. It shall submit to the Council of Representatives an annual report in writing on the editorial conduct of the journals which shall include a summary of the number of manuscripts received, accepted and rejected.]

*9. The Education and Training Board shall consist of not less than six Members of the Association, who shall serve for terms of not less than three years each. It shall have general concern for all educational and training affairs which involve psychology, especially those which transcend more than one Division or group of psychologists. It shall have the responsibility for the supervision and coordination of the committees of the Association whose activities fall within its scope.*⁴⁰

³⁹ See Footnote 38.

⁴⁰ Any ambiguity with respect to which special committees fall within and which do not fall within the scope of the Education and Training Board, the Board of Pro-

10. The Board of Professional Affairs shall consist of not less than six Members of the Association, who shall serve for terms of not less than three years each. It shall have general concern for all aspects of psychology as a profession and shall be charged with the formulation of recommendations for the Association's general policy in professional matters, including establishing standards of professional practice, maintaining satisfactory relations with other professional groups, and fostering the application of psychological knowledge to the promotion of the public welfare at both state and national levels. It shall have responsibility for the supervision and coordination of the committees of the Association whose activities fall within its scope.

11. The Board of Scientific Affairs shall consist of not less than six Members of the Association, who shall serve for terms of not less than three years each. It shall have general concern for all aspects of psychology as a science, including the continued encouragement, development, and promotion of psychology as a science; scientific aspects of the program at the Annual Convention; and psychology's relations with other scientific bodies. It shall have particular responsibility for liaison with agencies giving financial support to scientific projects, for awards and honors in recognition of scientific achievement, and for seeking new ways in which the Association can assist scientific activities. It shall have the responsibility for the supervision and coordination of the committees of the Association whose activities fall within its scope.

ARTICLE [XII] XI

Regional Psychological Associations

1. A Regional Psychological Association may, upon vote of the Council of Representatives, become affiliated with the American Psychological Association, provided that a majority of its members are Members of the American Psychological Association.

2. An affiliated Regional Psychological Association shall be representative of the scientific and professional interests of the psychologists within a given region. For the purposes of these Bylaws, a region shall be understood to be a major geographic area. The objectives of an affiliated Regional Association

shall be to promote the interests of the Association in Professional Affairs, and the Board of Scientific Affairs will be resolved by Rules of Council.

ciation shall fall within the scope of [those] *the* objectives specified in Article I of these Bylaws, and its membership shall not be restricted on any basis other than [residence and professional qualifications] *psychological interests and qualifications or place of residence or work.*

3. An affiliated Regional Psychological Association shall exercise such control over its membership that membership in the affiliated association shall not imply membership in the American Psychological Association.

4. In the event that the Council of Representatives [believes] *finds* that the conditions of affiliation are not being fulfilled by an affiliated Regional Psychological Association or that its affiliation is no longer in the best interest of the American Psychological Association, the principal officers of the Regional Association shall be so informed and the affiliation may thereafter be terminated by a two-thirds vote of the Council of Representatives.

ARTICLE [XIII] XII

State Psychological Associations [and Their Representation]

1. A State Psychological Association may upon vote of the Council of Representatives be affiliated with the American Psychological Association, provided that ten or more of its members are *Members* of the American Psychological Association. Continuing [membership] *affiliation* shall depend upon the State [Psychological] Association's conforming to the purposes and stated policies of the Association. For the purposes of organization, the District of Columbia, the territories and commonwealths of the United States, and the provinces of Canada are to be regarded as the equivalent of states. In areas where there are relatively few psychologists, an organization extending beyond state boundaries may be affiliated, so long as it does not include an area in which there is a State Association.

2. A State [Psychological] Association shall be representative of all the scientific and professional interests of psychologists within the state. Its name should be the name of the state, followed by the words "Psychological Association." Its objectives shall fall within the scope of those specified in Article I of *these Bylaws*, and its membership shall not be restricted on any basis other than psychological interests and qualifications or place of residence or work.

3. Each [affiliated state society] *State Association* shall exercise such control over its membership that membership in the [affiliated organization] *State Association* shall not imply membership in the American Psychological Association.

4. In the event that the Council of Representatives [believes] *finds* that the conditions of affiliation are not being fulfilled by a [given organization] *State Association* or that its affiliation is no longer in the best interest of the American Psychological Association, the principal officers of the [affiliated organization] *State Association* shall be so informed and the affiliation may thereafter be terminated by a two-thirds vote of the Council of Representatives.

5. *The term, State Association, as used in these Bylaws, shall mean a State Psychological Association affiliated with the Association, or a combination of such associations joined together for the purpose of election of a Council Representative, as elsewhere authorized in these Bylaws.*

[5.7 Each State Psychological Association having 100 or more members who are members of the American Psychological Association shall be entitled to elect a Representative to the Council of Representatives. Such Representatives shall be members of the State Association and of the American Psychological Association, and shall be elected for a term of three years by those members of the State Association who are also members of the American Psychological Association. A Representative who has served for three years shall not be eligible for immediate re-election.]

[6.7 Any group of State Psychological Associations not qualified under the preceding section to elect a Representative may, by mutual agreement, associate themselves in order to elect one Representative provided that their combined membership includes 100 or more members of the American Psychological Association, and provided further that the terms of their agreement, including provisions for its termination, are set forth in writing to the officers of the American Psychological Association. In all other respects, such joint Representatives shall be governed by these Bylaws as if they were Representatives of a single State Association.]

[7] 6. In matters of mutual concern to the State *Associations* and *the* [national] Association[s], it shall be the responsibility of the American Psychological Association to encourage and assist the State Associations in taking responsible action and, *when advisable*, to formulate [when advisable] standards of uniform practice that will guide the State Associations. [and] It shall be the responsibility of [the] *each* State Association[s] to keep the [national] Association and other State Associations adequately

informed of actions affecting the welfare of psychologists beyond its own state boundaries.

ARTICLE [XIV] XIII

Affiliation of Other Organizations with the Association

1. Other organizations whose general purposes fall within the scope of Article I of these Bylaws may become affiliated with the American Psychological Association in accordance with the provisions of this Article.

2. Affiliated organizations shall represent groups of people, such as students of psychology, a substantial proportion of whom are not [members of] *eligible for membership in*⁴¹ the Association. Such organizations shall not be local in character, nor shall their membership be limited on other than academic, scientific, or professional grounds. It shall be made clear that membership in an affiliated organization does not imply membership in the American Psychological Association and that the Association assumes no responsibility for the administration or financial affairs of the affiliated organization.

[3.⁸ An organization desiring affiliation with the American Psychological Association shall petition the Council of Representatives for affiliation, accompanying such petition with a statement of its aims, a copy of its By-Laws, and lists of members and officers. Such a petition shall be examined by the Board of Directors, who will transmit the petition with their recommendation for action to the Council of Representatives.]

[4] 3. The Council of Representatives shall determine [from time to time] what privileges of the Association [such as program time at the Annual Convention, subscriptions to journals, and representation on the Council in accordance with Article V of these By-Laws,]⁶ may be granted to [affiliate] organizations *which affiliate with the Association under the provisions of this Article*. [Such privileges may be granted in accordance with specific conditions specified by Council.]

⁴¹ The original intent of this Article was to include groups like Psi Chi and is better expressed as amended. Affiliation of groups who are eligible for membership—i.e., who are established psychologists—is undesirable, except by a special ad hoc amendment to the Bylaws—such as that for State and Regional Associations—since it creates a tie of undefined legal limits. Groups, a substantial proportion of whom are eligible for membership, should ordinarily become Divisions rather than affiliates.

[5] 4. In the event that the Council of Representatives believes that the affiliation of an organization under this Article is no longer in the best interest of the American Psychological Association, the principal officers of that organization shall be so notified and thereafter the affiliation may be terminated by a two-thirds vote [of the members] of the Council of Representatives. [present at a stated meeting.]

ARTICLE [XV] XIV

Affiliation[s] of the Association with Other Organizations

1. The Council of Representatives may establish affiliation[s] with national and international scientific and professional organizations by two-thirds vote of those present at a [regular] meeting, may elect such representatives thereto as are necessary and proper, may authorize the payment of appropriate fees for such affiliation, and *by two-thirds vote of those present at a meeting* may terminate such affiliation[s] when [they are] *it is* not in the interest of the Association.

ARTICLE [XVI] XV

Central Office

1. The Association shall maintain a Central Office for the promotion of the objectives of the Association, [and] its Divisions, *and State Associations*. [The functions of the Central Office shall include the administrative detail of the Association, the business management of publications, issuance of the Directory, facilitation of personnel placement, promotion of public relations, and such other general and special services as are allocated to it by the Council of Representatives and the Board of Directors. Functions may be allocated to the Central Office by Divisions, provided they are consistent with these By-Laws. Details of arrangements between Divisions and the Central Office shall be approved by the Board of Directors.]⁸

[2.] The Central Office shall be established at such a place and with such facilities *and functions* as the Council of Representatives may direct.

[3.] The Executive [Secretary] Officer shall be the Director of the Central Office. [and as such shall be responsible to the Board of Directors.]⁷

[4.⁹ The Executive Secretary shall appoint such office personnel and acquire for the Association such office materials and equipment as the budget specifications warrant. Appointments of professional personnel to his staff shall be approved by the Board of Directors.]

[5. The Executive Secretary] *He shall report annually on the operations of the Central Office to the Board of Directors, [and] to the Council of Representatives, and by publication to the membership.* [A summary of the report shall be presented to the Association at the session of the Annual Convention devoted to Report of the Council of Representatives, and shall be published in the American Psychologist.]⁸

ARTICLE [XVII] XVI

Publications

1. Such records, reports, proceedings, journals, and other [publications] *documents* shall be published as are authorized by these Bylaws or by vote of the Council of Representatives. [Among these journals shall be] *The Association shall publish an official organ [known as the American Psychologist, which shall contain discussion of professional problems, programs, reports, proceedings, announcements, presidential addresses and such other official papers as the Council of Representatives may deem appropriate.] and a journal which shall abstract the psychological literature. [and be known as Psychological Abstracts.]*⁸

[2.⁸ The Council of Representatives has the authority to acquire journals and other publications by purchase or deed of gift, and shall honor previous agreements contained in contracts or deeds of gift. With the approval of the Council of Representatives, Divisions may assign the business management of their own special publications to the Central Office. A division may require its members to subscribe to its own special publications.]

[3.⁸ The business management of the publications of the Association shall be the responsibility of the Board of Directors which shall submit a budget annually and shall report annually in writing to the Council of Representatives and to the membership on the financial status of the Association's publications. The Board of Directors may delegate its responsibility for the management of the publications to the Executive Secretary, who shall be responsible for the annual preparation of the budget and financial report, and for the business details of the publications, in accordance with the policies outlined by the Board of Directors. He shall secure competitive bids for publications and shall maintain accurate mailing lists of subscribers and shall be responsible for the storage and subsequent sale of back numbers.]

[4.⁷ The Council of Representatives shall elect a Publications Board which shall include three members of the Council of Editors and six members of the Association who are not, at the time of election, editors of Association journals and who are chosen to represent different interest areas of psychology. These members of the Publications Board shall be nomi-

nated by the Board of Directors and shall serve for terms of three years, staggered so that one editor and two non-editors are elected each year. In addition, the Treasurer and the Executive Secretary shall be ex-officio members of the Publications Board. The Chairman of the Publications Board shall be elected annually by the Council of Representatives upon nomination by the Board of Directors. It shall be the function of the Publications Board to make recommendations to the Council of Representatives through the Board of Directors on publication plans and policies, including recommendations on the management of publications, on the acquisition, initiation, or discontinuance of publications, and on the nomination of editors except the editor of the American Psychologist. The Publications Board shall meet at least once each year prior to the annual business meeting of the Council of Representatives. At this meeting the reports from the Council of Editors and the Executive Secretary shall be reviewed, recommendations with regard to the management of the publications prepared, and nominations for editorships made. At its discretion, the Publications Board may invite representatives of any of the publications of the Association or of the Divisions of the Association to be present to consider common problems.]

[5.⁸ The Council of Editors shall consist of the editors of all of the journals of the Association. It shall be the duty of the Council of Editors to outline general editorial policy, and to supervise the editorial conduct of the journals. The Council of Editors shall select its chairman annually. It shall have power to draw up rules and regulations for the conduct of its own meetings, for the guidance of editors, for the selection of assistant and associate editors, and for the submission of manuscripts. It shall submit to the Council of Representatives an annual report in writing on the editorial conduct of the journals which shall include a summary of the number of manuscripts received, accepted and rejected.]

[6.⁸ Editors of Association journals except the American Psychologist shall be elected for a term not to exceed six years, one or two editors retiring at the end of each calendar year. Such editors may be re-elected for one term only, except in the case of Psychological Abstracts, where a longer period of service may be authorized by vote of the Council of Representatives. Election shall be by the Council of Representatives upon nomination by the Publications Board. Editors shall normally be elected one year prior to their taking office as editor. In the case of the disability or resignation of any editors, the Council of Editors, through its chairman, shall be responsible for the editorial conduct of the journal concerned, until a successor is duly elected to fill the unexpired term. By two-thirds vote of those present at an annual business meeting, the Council of Representatives may terminate an editor's term before its normal expiration.]

[7.⁷ The editor of the American Psychologist shall be nominated by the Board of Directors and elected by the Council of Representatives. His length of

service shall be determined by the Council of Representatives upon recommendation of the Board of Directors.]

[8.⁸ It shall be the duty of each editor to conduct his journal in conformity with the general policies outlined by the Council of Editors; in addition the editor of the *American Psychologist* shall be responsible to the Board of Directors in matters relating to professional policies and public relations of the Association.]

ARTICLE [XVIII] XVII

Annual Convention

1. There shall be an Annual Convention of the Association at a time and place to be determined by the [Council of Representatives] *Board of Directors*.⁴² [Announcement of time and place of the Annual Convention shall be made by the Council of Representatives one year, and plans shall be made at least two years, in advance thereof.]

[2. All Divisions of and groups within the Association may propose programs for the Annual Convention to the Convention Program Committee, which shall have the responsibility of accepting and rejecting such proposals.]⁸ Joint meetings with related societies [are] *shall be* subject to the approval of the Board of Directors. [The Convention shall be arranged by the Convention Program Committee in collaboration with the Central Office.]

[3. The Central Office shall provide such counsel and material assistance to the Division Program Committees and to the Convention Program Committee as may be requested and as seems to the Executive Secretary and the Board of Directors to be most effectively and economically provided by that office without prejudice to the best interests of the Divisions and the Association.]

[4. The Convention Program Committee shall arrange] *There shall be* a session at the Annual Convention for [the Report of] *a report from* the Council of Representatives with the President of the Association presiding, such session not to conflict with other major program interests. At this session, the Council of Representatives shall submit a summary report of its business for the year, including summary reports from the Treasurer, the Board of Directors, and the Executive [Secretary] Officer.

ARTICLE [XIX] XVIII

Dues and Subscriptions

1. The basic Association dues to be paid annually by Members and Associates shall be determined by the Council of Representatives and shall include

subscriptions to [the *American Psychologist* and to] such [other] publications as may be determined by the Council of Representatives. In addition to the basic dues each member shall pay a fixed amount, to be determined by the Council of Representatives, for each Division over and above one to which the member belongs.

2. The annual dues to be paid by Foreign Affiliates and participants in the *Student Journal Group* and the publications of the Association to which they [are] *shall be* entitled shall be determined by the Council of Representatives.

3. Nonpayment of dues for two consecutive years shall be considered as equivalent to *a request for* resignation from the Association.

4. There shall be made available to each Division a fixed amount, to be determined by the Council of Representatives, from the dues paid by each member of the Association who is a member of that Division. A Division may require additional dues of its own members.

5. At the end of the fiscal year all unexpended funds allocated to Divisions from Association dues shall revert to the treasury of the Association, unless the Board of Directors and the Division in question agree that these funds be allowed to accumulate. [Should unexpended funds remain in excess of the amount agreed upon, such funds will revert to the treasury of the Association.]⁸ These provisions shall not apply to any special assessments collected in the name of the Division.

6. The Council of Representatives may authorize special subscription rates to publications of the Association for special groups of subscribers.

7. Any Member who has reached the age of sixty-five years and has been a Member of the Association for at least twenty-five years shall be exempt from further payment of dues upon informing the Central Office of his or her eligibility. Although such Members shall be exempt from paying dues, they shall retain other rights and privileges of the Association. [except that they shall receive the journals only upon payment to the Association of the subscription price regularly charged a Member either separately or as a part of his dues.] *The subscription price to be charged such Members for publications of the Association shall be determined by the Council of Representatives.* (For purposes of this Section, membership in the American Association of Applied Psychology prior to its amalgamation with the American Psychological Association shall be counted.)

⁴² Changed in accordance with a vote of Council.

ARTICLE [XX] XIX

Amendments

1. The Association, by mail vote of the *Members* [of] *on* the official rolls of the Association at the time of mailing, may adopt such Bylaws or amendments to Bylaws as [it deems] *are consistent with the Association's Certificate of Incorporation and are deemed* necessary for the management of the affairs of the Association. [the prescription of the duties of officers, committees and employees, and for the conduct of all kinds of business within the objects and purposes of the Association.]
2. Amendments may be proposed (a) by the Council of Representatives, (b) by the Policy and Planning Board, (c) by the Board of Directors when approved by the Council of Representatives by a majority vote, or (d) by petition signed by [200] *two hundred Members* of the Association. A copy of each amendment proposed, with space appropriate for voting and such explanations of the amendment as [the Council of Representatives] *are deemed* necessary, shall be mailed to the last recorded address of each *Member*. Sixty days after date of mailing, the poll shall be closed and the votes counted by the Election Committee, which shall certify the result to the Council of Representatives at its next Annual Meeting, at which time the amendment, if passed by two-thirds of all the *Members* voting, shall go into effect.

Comment

The Impact of Scholarship Money

In the August 1959 issue (pp. 480-488) of the *American Psychologist* in an article by John G. Darley this statement appears:

There is, as yet, no evidence whatsoever that scholarship and fellowship programs, such as the National Merit Scholarship Corporation and others, will materially increase the overall number of potentially good college students coming on [to higher education] from the senior year of high school (p. 481).

This statement is subject to a variety of interpretations, and I am concerned that it may encourage the erroneous belief that scholarship programs, such as that of the National Merit Scholarship Corporation, are of no value in conserving human resources.

I assume that the quotation refers to such programs collectively and questions whether increased amounts of money for scholarships will reduce the number of able students who discontinue their schooling after high school.

Some evidence on this point comes from Minnesota. After a survey of Minnesota high school seniors in 1950, Berdie (1954) estimated that

a scholarship program in Minnesota amounting to slightly over a million dollars a year could increase the number of college graduates each year by about 12 per cent (p. 143).

After a survey of similar studies, Cole (1956) concluded that

our estimate of the annual number of high ability high school graduates in the nation not now [i.e., in 1955] going to college for financial reasons, but who presumably could be won to higher education by means of a scholarship program, is between 60,000 and 100,000 (p. 77).

To cite only one more: a survey conducted by the Educational Testing Service (1957) of 32,750 students, selected to be representative of the nation's high school seniors in 1955. It was estimated that

some 150,000 [additional] high-ability students . . . would have gone to college had adequate financial support been offered to them (p. vii).

The statement quoted might have meant that certain scholarship programs are finding largely individuals already college bound. However, insofar as such students require scholarship support, the new program supplies new money and relieves existing scholarships, largely controlled by colleges, of supporting these students and permits their funds to be used for other students and thus indirectly helps to provide educa-

tional opportunities for additional able students. A letter just received in this office illustrates this point:

All of your Merit awards at this college are to men we would have helped with our own scholarship funds if they had not won Merit awards and so your help represents a real strengthening of the college's scholarship resources.

There is another point worth considering. Scholarship and fellowship money frequently permits the student to attend an institution which he rates as better. No one who has studied our range of colleges will fail to note the vast differences among them. For an able student one college may be far superior to another in stimulating and preparing him to carry on his education into the graduate or professional level, and this influence is important in developing our talent.

The greatest financial aid program of all times was the GI Bill. Adequate studies have not been made of the impact of this enormous program; but it would be, in my opinion, unwise to underestimate the extent to which it has made a higher education possible for large numbers of able students who otherwise would not have gone to college and thus has conserved and developed our supply of talent.

The recognition of excellence by scholarship awards has many influences directly related to increasing the overall number of potentially good students going on to college.

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- JOHN M. STALNAKER
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Terms in Conditioning (?)

Discussing the ambiguity of the term *unconditioned* and the desirability of using it in the sense of *undone*, *unlearned*, or *extinguished*, Back (*Amer. Psychologist*, 1959, 14, 595-596) quotes me as:

Razran (*Arch. Psychol.*, 1933, No. 148) stated many years ago that "a behavioral review of conditioning . . . necessitates a considerable overhauling of Pavlovian terminology." But he did not explain his reasons for such a necessity except to say that "conditioning stimulus will be used in-

stead of *unconditioned stimulus*, as the latter—besides its assumption—is usually confusing in conditioning of higher order; similarly, *original response* will replace *unconditioned response*."

One wonders why Back has not extended the quotation to include the immediately following sentence:

Unconditioning will be employed in place of *extinction* for the decrement and final disappearance of a C-R upon repeated applications of the conditioned without the conditioning stimulus . . ." (*op. cit.*, p. 8).

This is thus just what Back suggests to do. The fact is that for several years I had continually used *unconditioning*, *uncondition*, and *unconditioned* for *extinction*, *extinguish*, and *extinguished*, as well as *conditioning* stimulus and *nonconditioned* stimulus for *unconditioned* stimulus (conditioning when the stimulus was involved in the training, and *nonconditioned* when it was not). However, no one followed me. Moreover, while earlier APA editors let me reign freely with my terms, latter-day ones objected and suggested strongly that I fall in line with "accepted" usage—and I fell. I frankly doubt whether the rather obvious "explanation" of the two uses of the prefix *un-*, readily found in any etymological dictionary including that of Webster (whose "explanation" is quite similar to that of Back), would have altered the situation much.

Indeed, in retrospect I must confess that, after a few years, I had second thoughts about the relative merits of *extinction* and *unconditioning* and decided in favor of the former. For one thing, it seemed advisable to preserve Pavlov's conception of the phenomenon as not merely a noncommittal behavioral reversal but as involving a particular mechanism of opposing and interacting forces. For another, a literal translation of the Russian expression (*ugasheniye* for those interested) insured lexical consistency for the term in different languages and specifically obviated the confusion of having Russian-English translators and abstractors translate a Russian word by a totally different English one. More than that, to denote the pure behavioral reversal of conditioning there was the wholly unambiguous prefix *de-* (so widely used in word building in the experimental sciences from *deactivate* to *dezynotize*)—*decondition*, *deconditioning*, and *deconditioned* articulating both linguistically and empirically with *recondition*, *reconditioning*, and *reconditioned* (*reconditioning* as the cause of *deconditioning*).

In short, I concluded that the verbs *extinguish*, *decondition*, and *recondition* together with their gerundial and participial derivatives exhausted fully the phenomenon of CR repetition decrements and that hence *uncondition* and *unconditioning* were superfluous; while, through contrast and elimination, *unconditioned* lost its ambiguity and could well be used in the sense of *nonconditioned*, *not-conditioned*, or *never-conditioned*. (The reversal meaning of *un-* is common only in verbs

and their participial adjectives and not in adjectives with no verbs; Webster's general definition of *unconditioned* is not conditioned and so are his definitions of the term in "education" and "philosophy.")

It might also be noted that Back's suggestion to use *extinction* for repetition decrements of unconditioned reactions ignores the fact that *adaptation*, *negative adaptation*, and *habituation* have long denoted the phenomenon in Anglo-American behavioral literature.

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A Comment on "Of Management and Measurement"

Lawshe's "Of Management and Measurement" (*Amer. Psychologist*, 1959, 14, 290-294) proved both stimulating and provocative albeit short of satisfying. While I completely agree that "psychology's contribution to this ongoing scene in the field of American enterprise has been of modest proportion," this article is itself a case in point. It exemplifies one of the two "major deficiencies in the field of industrial psychology . . . work on problems that fit our methods rather than to devise methods that are appropriate to the major problems of American management."

As Lawshe points out, the journals are replete with studies of a microscopic and repetitive nature (to which, I suspect, we must all plead guilty of contributing), with a paucity of applied and basic studies being undertaken and/or published. While one might take issue with a given piece of research necessarily being both applied and basic, as defined and suggested herein, the greater injustice lies in the promulgation of "An analysis of the problems of American management . . . the development of managers, employee motivation . . . and organizational effectiveness." I doubt whether Lawshe, or for that matter any of us, has either the knowledgeability or foresight to decide what the problems of management are that are most in need of remedy. From his field of experience and frame of reference the three mentioned problems may very well be ones of substance and requiring solution. On the other hand, I, for example, could cite a number of other pressing problems necessitating resolution based upon my field of experience and frame of reference. The point is: different industries generally as well as different companies specifically are confronted with their own indigenous problems. As an applied psychologist one must conceptualize this problem right "off the bat!"

It is next pointed out in the instance of the differential perception study that it is "representative of the kind of activity that will have to be engaged in more and more if industrial psychology is to make its contribution to management in the next decade." Rather than deal at length with the sundry aspects of

the study as cited, might I offer this suggestion: if industrial psychology is to provide American management with a distinct service, it will have to rid itself of its present intellectual myopia!

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The Snark Revisited

A decade ago Beach (*Amer. Psychologist*, 1950, 5 115-124) analyzed American comparative psychology with respect to subject and behavior-process samplings. His analysis demonstrated rather strikingly that our comparative psychology was disproportionately dedicated to investigating rat behavior, primarily rat learning.

One may wonder if, during the ten years since Beach's address, any significant changes have occurred in the relative distribution of animals used as subjects in psychological experiments? To answer this question, Beach's general scheme of classifying animal subjects was applied to the original research reported in the *Journal of Comparative and Physiological Psychology* for the three years preceding the publication of his address (1947-49) and for the immediately past three years (1956-58). In those instances when one article was devoted to the study of two or more different kinds of animals a tally was made for each different biological order (or higher category) studied—e.g., cat and dog would be counted twice, while two species of monkeys would be entered only once. The results of this tabulation are as follows:

FREQUENCY OF STUDY

ANIMALS	1947-49	1956-58
Rats	88 (67%)	240 (62%)
Other mammals	32 (24%)	119 (30%)
Other vertebrates	7 (5%)	20 (5%)
All nonvertebrates	5 (4%)	11 (3%)
Totals	132	390

Any trend toward increased diversity in animal subjects or toward decreased popularity of the rat as a laboratory animal is of low magnitude; a chi square test reveals no significant difference between the 1947-49 and the 1956-58 distributions ($\chi^2 = 2.00$, $df = 3$, $P > .05$).

Certain trends in subject sampling are, however, concealed by this classification. If the category "Other mammals" is divided into two categories, "Primates" and "Other mammals," the breakdown is:

Primates	7 (5%)	71 (18%)
Other mammals	25 (19%)	48 (12%)

Now when these two categories are substituted for the single category and a chi square test applied to the resulting five categories, a significant difference between the two periods is obvious ($\chi^2 = 14.70$, $df = 4$, $P < .01$). Further analysis makes clear that the relative increase in the study of primates accounts for this significant difference (with the primate entries omitted altogether, $\chi^2 = 1.62$, $df = 3$, $P > 0.5$).

This increased interest in primate behavior is doubtless regarded by most psychologists as a desirable trend. Even with this exception, however, Beach's message seems no less applicable today than in 1949: the comparative aspect of animal behavior studies is still severely limited by a biased subject sampling.

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Value Potential in Psychotherapy

In conjunction with my current theoretical studies on Values in Psychotherapy, I have defined the concept of "value potential" versus that of "insight potential."

The question of an individual patient's prognostic chances is usually raised and discussed in terms of his capacity for insight. It is never raised nor discussed in terms of what might be called a patient's value potential. The reason for the oneness of the existing outlook on prognostic therapeutic chances lies undoubtedly in the general philosophy of modern psychotherapy. Under psychoanalytic influence, the assumption right along has been that anybody can be helped to an adequate adjustment, provided he has sufficient capacity for insight.

Furthermore, there are two kinds of insight: "that insight which is therapeutic" (L. Kubie) and the "working through" by which it has to be followed, as against the therapeutically impotent insight. But therapists seem to come increasingly to the realization that even proper insight and working through do not enable all their patients to solve their problems and to become changed human beings.

The difficulty with many of these unalterable individuals seems to lie in their inability to make a successful switch from the involvement in their emotional adjustment to the involvement in value creating. By "successful" I mean a switch which is not forced, which is not the result of renewed repression, but which takes place in the face of still existing and fully acknowledged inner problems with which the individual may still have to live for a long time and which may even require still further working through.

Values, as defined here, are preferential potential goals. Although they may represent only factual preferences of an individual, they are distinguished from the goals of drives by the fact that they are *chosen* goals. As chosen goals they serve a different purpose than drive goals. The chosen purpose represents an

intent of the individual, or else it has *meaning* for the individual. The meaningful goal in this context is defined as one related to *fulfilment*. Value then is a preferential goal in terms of its relationship to fulfilment.

I define as value potential the range of values an individual is able to encompass and the chances an individual has to bring his chosen goals to materialization. This chance seems to depend on a person's native equipment as well as on environmental influences and on the person's experiences of life. I hope to develop procedures which enable the therapist to determine a patient's value potential as compared with his insight potential.

The undersigned is of the opinion that the concept of value potential as a new aspect in personality theory may be helpful in more clearly defining one of the parameters of the patient's prognosis. *Zeitgeistisch, has anyone, working with this problem, evolved a similar concept or evolved some other concepts in this direction?*

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Education for Research in Psychology

Although one cannot but agree with most of the Estes' Park report (*Amer. Psychologist*, 1959, **14**, 167-179), one also wonders if the committee did not take a rather narrow frame of reference (their own) for their observations on education for research. Considered in a wider frame of reference their remarks may appear in a somewhat different light.

The committee writes somewhat facetiously about the "stereotype" of research. Yet it is not difficult to observe that among some truly great investigators the stereotype was an actuality. Curie and her husband first observed small differences in "previous findings" which could not be accounted for.

Crucial experiments growing out of [these] previous findings . . . [were] performed with great precision. The results [were] subjected to the closest scrutiny. . . . Finally, the now confirmed discovery was inserted in a systematized lattice of already available knowledge [Mendeleev's Periodic Table of Elements] to complete for posterity a forward step

Einstein's research was accomplished "with the aid of extensive intellectual paraphernalia." Pavlov's research was an outgrowth of a basic philosophical assumption that psychological phenomena can be studied by the methods of natural science. The stereotype, far from being either a fiction or a mere picture of confirmatory activities, is a schematic picture of the actual history of some great scientific discoveries.

However, not all useful research is of this calibre, and not all scientists are geniuses. A lot of good

though less original research has to be done to prepare and exploit the great discoveries. Ideas for this scientific spadework probably do arise in the way the report describes. The process of getting some of these ideas, which are sometimes messy looking, can be interpreted in terms of very orderly mathematical and logical procedures, i.e., of "intellectual paraphernalia," to which every scientist, including psychologists, must have been exposed in his youth.

1. Much scientific invention is the combining and permuting of elements (if they and their possible modes of operation can be identified). For example, one can construct a Mendeleev kind of Table of Conditioned Reflexes that would "generate" new experiments. Three "elements" are to be considered: conditioned stimulus, conditioned response, and reinforcement. These three elements are applied to a system (human or animal organism) with three relevant afferent and efferent subsystems: exteroceptive, proprioceptive, and interoceptive afferent, and the corresponding symbolic, muscular, and visceral-glandular efferent systems. Pavlov's research concerned mainly one of the 27 combinations possible between the three elements and the subsystems of the organism: conditioned stimulus acting through the exteroceptive subsystem, conditioned response being glandular, and reinforcement acting through the interoceptive system mainly. Table 1 gives examples of these and some other combinations. The reader may wish to construct the remaining ones for himself. All the experimental combinations known to me are included in the set, plus some new ones. The technique of combinations and permutations can generate not only new experiments, but also new theories. This can be demonstrated, for instance, on race relations cycle theories.

2. Another intellectual technique that can be used in psychology is also derived from mathematics: maxima and minima of functions. Hebb's exploration of extreme sensory deprivation and Pavlov's investigation of breakdowns under stress from excessive sensory input can be interpreted in terms of this technique. If we think of the amount of sensory input as a continuum, the exploration of the reactions of the organism to all the amounts of sensory input from the minimum (Hebb) to the maximum (Pavlov) could be planned systematically.

3. Still another technique, also derived from mathematics, is substitution of elements in a set: for example, in conditioned reflexes kidneys or stomach can be substituted for salivary glands as effectors (all the effectors forming a set). This technique can be used in conjunction with the first one if each subsystem of the organism is defined also as a *set* of organs or senses respectively (see, for example, Table 1, Nos. 2 and 5).

4. Some knowledge of a further item of intellectual

TABLE 1
(PARTIAL) TABLE OF CONDITIONED REFLEXES

"Elements"	Interceptive Stimuli or Visceral-Glandular Responses	Proprioceptive Stimuli or Joint-Muscular Responses	Exteroceptive Stimuli or Symbolic Responses	Experimental Arrangement	References
1. R* CS US	X X		X	Salivation Buzzer Contact with food	Pavlov's classical conditioning
1. R CS US	 X	X	X	Bar pressing Sight of bar Contact with food	Skinner's operant conditioning
3. R CS US	X X X			Diuresis Direct stomach irrigation (water flows out) Direct water injection into stomach (water stays in)	Bickov, K. M. <i>Cerebral cortex and the internal organs</i> . Moscow, 1954, p. 229
4. R CS US	 X 	X X		Paw flexion Direct stomach irrigation (water flows out) Electric shock	Bickov, K. M. <i>Cerebral cortex and the internal organs</i> . Moscow, 1954, p. 230
5. R CS US	 X	X	X	Lever pressing Sight of lever Electrical stimulation of rhinencephalic areas	Olds, J., & Milner, P. J. <i>comp. physiol. Psychol</i> 1954, 47, 419-427

* R = Response. CS = Conditioned Stimulus. US = Unconditioned Stimulus.

paraphernalia, viz., semiotics, could save some psychologists a lot of trouble. In his *Social Psychology* (1952, p. 252), speaking of social systems, Asch says: "we have a social system or a process of definite form that embraces the actions of a number of individuals. Such a system *does not reside in* the individuals taken separately, though each individual contributes to it; *nor* does it reside outside them" (at this point one may ask if it has any legitimate residence at all). Then we read: "it is present in the *interrelations* [italics added] between the activities of individuals." This is a semantic confusion. Interrelations, or a system of interrelations (= social system) is a logical construct (i.e., class of interactions over a period of time) which is formed by an *observer* (who may be a member of the group) or laid down in the statutes, e.g., of a club, where it might be said to be "present," if this expression has any surplus meaning. But it does not reside "out there" between the interacting people. The last part of the quotation is nonsense. This confusion would be quite harmless if it did not lead to false reasoning about causality. In a recent textbook we read, for example: "Attitudes can be expected to set up muscular tension patterns . . ." An attitude, being a class of responses to a given set of stimuli observed over a period of time (i.e., a

response tendency), logically includes tension patterns, which are parts of its definition, not its consequences. Psychologists should be familiar with this sort of fallacy since the days of the instinct controversy.

5. Then there is statistics. Not so long ago a very prominent psychologist said to me that during the last 20 years of his fruitful research activity he had had no use for statistics. He added (approximately): "If an experiment comes out right thirty-seven times and doesn't come out the thirty-eighth time, I just disregard the last one." Statistics tells us what to do with the adverse results of some of the replications, if they occur. Thus in making his inferences, a statistically minded scientist does not have to disregard unfavorable evidence, as the antistatistician does. Statistics also tells us whether or not in a given experiment we need 38 replications. Often we can manage with fewer. Those of us who have to think about the economics of research use statistics.

To sum up: the "intellectual paraphernalia" help in creative thinking. If taught appropriately, they could be used in research consciously and systematically, instead of unconsciously and haphazardly as at present.

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Psychology in Action

PSYCHOLOGISTS' CONCEPT OF THEIR ROLE IN INSTITUTIONS HOUSING THE "CRIMINALLY INSANE"¹

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AND

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IN the past decade there has been a marked growth in the number of psychologists and psychological services rendered in agencies for the treatment of the "criminally insane," paralleling the growth of the profession of psychology as a whole (Rogers, 1956, 1957; United States Department of Health, Education, and Welfare, 1954). However, this increase in personnel has not been accompanied by improved communication of specialized techniques and knowledge, although a start has been made in a closely related field (Corsini, 1956; Corsini & Miller, 1954; Sell, undated). The present study was undertaken to partially remedy this situation by publishing a list of those institutions or units of institutions which house the "criminally insane" and by surveying the psychologists' concept of their role in such agencies, including especial emphasis on psychotherapeutic functions.

A letter was sent to the Director of Mental Health in every state,² requesting a list of institutions or units of institutions in their states which house persons legally defined as "criminally insane," that is, those persons who have been adjudged not guilty of the commission of a crime by reason of insanity. It was known that the laws pertaining to the care of the "criminally insane" varied widely (Weihs, 1954), and it was hypothesized that treatment facilities differed accordingly.

Upon receipt of this information, a questionnaire was mailed to the superintendents of 56 such institutions in 48 states² with the request that they pass it on to the psychologist most intimately acquainted with

the division for the "criminally insane."³ In the event there was no psychologist associated with this division, the department heads were requested to indicate the fact. After a follow-up of nonrespondents, the final return comprised 89% of the 56 institutions.⁴ Since seven of the replies indicated that no psychologists were closely connected with this service, the results reported are for the remaining 43 agencies.

In addition to asking for the number of patients, full-time and part-time psychologists and their academic degrees, psychiatrically trained physicians, and board certified psychiatrists, the questionnaire contained five questions (four multiple-choice) directly pertaining to psychologic functions. These were:

1. Rough percentage of your staff's time given over to clinical evaluation, research, therapy, consulting with other staff members, teaching and training, and other
2. How satisfied in your psychology staff regarding your administration's recognition, respect, and utilization of your professional skills? (very satisfied, satisfied, dissatisfied, very dissatisfied)
3. Does the administration of your institution encourage or favor the use of psychotherapy and/or counseling done by psychologists? (strongly approve, approve, disapprove, strongly disapprove)
4. Are the opinions of the psychology staff taken into consideration in plans concerning the treatment or discharge of patients? (always, usually, occasionally, rarely, never)
5. Protection of the public should be the *primary* consideration that determines the staff's decision as to the discharge of patients committed as "not guilty by reason

¹ This study was completed in partial fulfillment of the requirements for a course in Professional Problems under the supervision of Robert S. Daniel, Chairman of the Department of Psychology at the University of Missouri; it was approved and underwritten by the Research Committee of State Hospital No. 1, Fulton, Missouri, where the authors were employed in the Psychology Department. The authors also wish to thank C. Scott Moss, Chief Psychologist at State Hospital No. 1, and others for their constructive suggestions.

² Alaska and Hawaii were not states at the time of the study.

³ The authors wish to thank Donald L. Leslie, Chief Psychologist, Lima State Hospital, Lima, Ohio, for supplying a partial listing of hospitals and hospital units for the "criminally insane."

⁴ A list of hospitals and hospital units for the "criminally insane" has been deposited with the American Documentation Institute. Order Document No. 6150 from ADI Auxiliary Publication Project, Photoduplication Service, Library of Congress; Washington 25, D. C., remitting in advance \$1.25 for microfilm or \$1.25 for photocopies. Make checks payable to: Chief, Photoduplication Service, Library of Congress.

of insanity." Your opinion: (agree, disagree). Administration's viewpoint: (agree, disagree).

RESULTS

The Directors of Mental Health (and the various psychologists) were very cooperative in forwarding information on the "criminally insane" in their respective states. A few made it clear that they were responsible for the mental health program and either had no official connection or little contact with the hospitals. Others apparently had well coordinated programs.

At this point, it might be well to stress the great differences which prevail between institutions of this type. New York, for example, has two state hospitals for the "criminal insane," both under the supervision of the Department of Correction. Dannemora serves male convicts declared mentally ill while serving a sentence for a felony. Matteawan houses the "criminally insane," plus mentally ill male nonfelons, mentally ill female prisoners, and various patients from state hospitals.

The Men's Reformatory in Iowa, under the Board of Control, houses the "criminally insane" in addition to a number of mentally ill persons who must remain there until they are adjudged competent to stand trial for legal offenses. In those other states which keep some "criminally insane" in prisons, the motive appears to be security; the state hospital may retain technical custody. In many states, mentally ill prisoners can be transferred to mental hospitals for treatment; the time spent there may or may not count toward their sentence.

Table 1 summarizes the data on the number of patients, psychologists, and medical psychiatric personnel.

TABLE 1
NUMBER OF PATIENTS, PSYCHOLOGISTS, AND PHYSICIANS; AND
RATIO OF PATIENTS TO PSYCHOLOGIC AND
MEDICAL STAFF

Item	Number of Respondents	Range	Mean	Median
Number of patients	39	5-2,000	318	150
Number of psychologists	27*	0-3	1.3	1
Number of physicians	27*	0-13	2.6	2
Patients per psychologist	27*	5-2,000	307	276
Patients per physician	27*	5-782	155	138

* Mean number of patients 396; median 276.

TABLE 2

STAFF DUTIES OF PSYCHOLOGISTS IN PERCENTAGES
(33 Respondents)

Activity	Range	Mean	Median
Evaluation	1-97	49	50
Therapy and/or counseling	0-40	17	20
Consulting	0-25	9	10
Teaching	0-20	5	5
Research	0-20	5	3
Other	0-30	3	0

In addition, it presents the ratio of patients per psychologist and per medical psychiatric staff member. The range in number of patients and ratio to staff varies widely from one institution to another: 14 institutions have 300 or more patients with only Lima, Ionia, Farview, and Matteawan State Hospitals housing over 1,000 patients; 41% of the psychologists are full-time, while 56% of the units have only part-time psychologists.

Table 2 depicts the percentage of total time devoted by psychologists to their various duties. It is immediately apparent that the major activity is psychodiagnosis and secondarily that of psychotherapy, although 21% of the institutions reported no psychotherapy or counseling.

Table 3 indicates that medical administrations have strongly favorable attitudes toward psychologists performing psychotherapy and that as a whole psychologists working with the "criminally insane" are fairly well satisfied in their relations with their administration. The apparent discrepancy between the attitudes of the administration toward psychologists doing psychotherapy and the percentage of time actually spent in this activity may be due to the disproportionate amount of time devoted to the routine but very important job of psychological evaluation.

The administrations' view on the subject of the protection of the public in relation to the discharge of patients (as perceived by the respondents) and that of the psychologists do not closely coincide. Psychologists apparently tend to judge each case more upon its individual merits than do the administrators. Of the psychologists, 53% agreed that the protection of the public was the primary consideration in discharging patients, while they felt that 71% of the hospital heads agreed with this philosophy.

In attempting to determine what factors entered into

TABLE 3
RELATIONSHIP BETWEEN MEDICAL ADMINISTRATION
AND PSYCHOLOGY
(39 Respondents)

Question	Response category			
	Strongly approve	Approve	Disapprove	Strongly disapprove
Administration's attitude toward psychotherapy by psychologists				
Percent agreement	36	61	3	0
Consideration of psychologists' opinion in planning*	Always	Usually	Occasionally	Rarely
Percent agreement	23	56	18	3
Satisfaction with administrations' utilization of skills	Very satisfied	Satisfied	Dissatisfied	Very dissatisfied
Percent agreement	36	49	15	0

* A "Never" category was not used by respondents.

the attitude of administrations toward psychotherapy conducted by psychologists, comparisons were made between those institutions reporting an attitude of "strong approval" as contrasted to those which only "approved." No significant difference was found in the percentage of time spent in psychotherapy. No significant relationship between the degree of administrative approval of psychotherapy and the educational level of the psychology personnel (master's versus doctoral level) was apparent. There was no systematic relationship between the degree of approval and the absolute number of medical personnel in the institutions; however, there was a more favorable attitude in those institutions having a smaller ratio of patients and physicians. No relationship appeared between the geographic location of hospitals (north vs. south, east vs. west) and the degree of approval of psychotherapy done by psychologists.

DISCUSSION

The initial assumption that treatment facilities for the "criminally insane" varied widely was borne out by the study. It is evident that there are a few large institutions and many smaller units. Other data reveal that: 3 western states have no provisions for treatment of the "criminally insane," 3 states have separate hospitals for the Negro insane, 3 states use prison wards, and at least 11 states house the "criminally insane" in their regular hospital population. Only California specifically listed special facilities for women, although it is assumed that all states segregate on the basis of sex within hospital units of this type.

The percentage of time spent by individual psychologists in their various activities differs considerably from institution to institution. It is of interest that the median time spent in these activities corresponds closely with the allocation of psychological staff time

in state institutions for the mentally retarded (Berger & Waters, 1956). The lack of time spent in research perhaps reflects the strong emphasis placed upon service functions, such as psychodiagnosis, rather than a disinterest in this vital area. A considerable part of the psychologists possess the PhD degree. However, it could be argued with solid support from the facts that even research trained clinicians value "helping others" above their research role. It is an interesting commentary that, while clinicians in training are taught that their "unique contribution" is research, in reality most of them seem primarily motivated to "help people." There are few productive clinicians research-wise (Clark, 1957).

Although the competence of psychologists in psychotherapy is widely accepted, the investigators endeavored to find out what attitudes prevailed in institutions for the "criminally insane." The fact that institutions reporting differences in the degree of approval tend, nevertheless, to report similar percentages of time spent doing psychotherapy could reflect a lack of discrimination between the rating categories of "strongly approve" versus mere "approve." The difference in the ratio of psychiatric personnel to patients in institutions "strongly favorable" as contrasted to those that only "approve" suggests there may be a real distinction, however. The administrations of those institutions in which there is a more favorable ratio of physicians to patients may have a more "enlightened" attitude regarding psychotherapy in general and the role of their psychological personnel in particular, although service demands for psychological evaluation remain high and therefore limit the time that can be spent in psychotherapy.

No meaningful relationship was established between the psychologists' degree of satisfaction with the administrations' utilization of their professional skills and with the extent to which their opinions were taken into consideration. In fact, the one psychologist who replied that his opinion was rarely considered indicated that he was very satisfied! The overall degree of reported job satisfaction is surprisingly high since in the maximum security treatment situation the conflicts between therapeutic and custodial philosophies are maximized.

It should be kept in mind that, as a matter of courtesy and convenience, the questionnaires were sent through the superintendents of the various hospitals. Methodologically, a distorted picture could be obtained if replies went back through official channels. The authors feel that this did not occur except in one case, and even then the psychologist wrote in "at the moment" after "satisfied." Typically, a returned questionnaire would be accompanied by a page or more of additional information, qualifications, comments, and criticism. It was later impossible to write to the homes

of the reporting psychologists since provision had been made for anonymity.

More than anything, these findings might indicate that, just as institutions vary in size and scope of treatment, so do the satisfactions and tribulations of working in institutions for the "criminally insane" vary from psychologist to psychologist. That is, there may be selective factors which attract some clinicians to this type setting. If state institution psychologists acquire lower status through association with their patients, one would expect their status needs to be highly frustrated in units for the so-called "criminally insane," since it is difficult to imagine any other group which the public holds in more opprobrium. On the other hand, a psychologist may gain some notoriety and be viewed as one who can "handle himself" with such reputedly dangerous individuals.

Jacobson, Rettig, and Pasamanick (1959) suggested that state institution psychologists may be oriented toward public service. To a clinician, work with the "criminally insane" may be a challenge, an opportunity for service to a long neglected group, and an ideal chance to conduct research with a "captive" population. Depending upon the extent to which intellectual stimulation and professional freedom are lacking in the maximum security setting, clinicians may tend to move elsewhere. Further research might be conducted on the sociological structure of such units and on the comparative length of stay of psychological personnel.

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INDUSTRIAL PSYCHOLOGY IN AFRICA

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One's first reaction to the title, "Industrial Psychology in Africa," could be one of incredulity: there just could not be any such thing or, at any rate, not enough to be worthwhile taking precious time to read about. A visit to the right places in Africa, however, would show that selection testing, as an example of one technique of industrial psychology, has already demonstrated great value in this rapidly developing continent, a continent of increasing importance to the free world and the United States (American Assembly, 1958). One African told me, after having taken a battery of tests and *not* having been accepted for the job he was trying for, that for the first time in his life he had been treated fairly. He had not been discriminated against because of the tribe or family he belonged to.

The techniques of industrial psychology offer striking advantages not only to Africans at the employee level but to managements as well. Several times I was

told in Africa that a major personnel problem for industrial managements was to get to know their African employees well enough to intelligently select foremen from among them. Even the Africans themselves in modern large African enterprise find it difficult to get to know each other well, coming from the variety of tribal backgrounds and linguistic groups they do. Traditional methods of foreman selection have not worked particularly well, but appropriate psychological tests (especially leaderless group tests) have. For example, in South Africa, leaderless group tests, conducted in pidgin Zulu, for the selection of "boss-boys" (African foremen) have shown the following validity: chance selection, 36% wastage; traditional selection, 17% wastage; and leaderless group tests, 3% wastage. See also Biesheuvel (undated; 1952, pp. 11-12).

The industrial psychology one finds in Africa is, of

course, not American. Instead, it is mostly British or French. In South Africa there is considerable British and American influence, but the resultant is becoming indigenous South African. The only other very significant American influence I found was in Liberia.

I did not go to Africa to look for evidences of a budding industrial psychology. My actual mission was to assess the impact that American university international programs (Institute of Research on Overseas Programs, 1958) were making in Africa. This mission took me on a rather complete tour of the continent during the latter half of 1958. My study of American university impact with respect to Africa was but one phase of a world-wide study of such impacts, made possible by the Carnegie Corporation of New York.

As time permitted in Africa, I tried to look in on industrial psychologists where I could find them. I hoped that some of them might develop into useful informants on the impact study and also that they would tell me something of what they were doing professionally.

A preliminary step, before actually leaving for Africa, was to contact the International Association of Applied Psychology. The association told me that they had but four members in Africa: in Casablanca, Morocco; Dakar, Senegal; Douala, Cameroun; and one they had not heard from for a while in Cairo, UAR. I found the psychologists in Douala and Cairo, but the other two had since gone back to France. The then available APA *Directory* showed no members in any African country except Egypt, and these were mostly teachers in universities who seemed to have little or no interest in industrial psychology.

The new *International Directory of Psychologists* (Jacobson & Duijker, 1958) was not yet available. A subsequent check on this volume shows psychologists and industrial psychologists (my classification from directory data) in Africa as follows:

COUNTRY	ALL PSYCHOLOGISTS	"INDUSTRIAL PSYCHOLOGISTS"
Algeria	6	4
Belgian Congo	4	3
Cameroun	1	1
Egypt	23	2
French Equatorial Africa	2	2
French West Africa	5	2
Ghana	1	1
Morocco	8	3
Nigeria	2	0
Tunisia	3	3
Uganda	1	1
Union of South Africa	127	40
All Africa	183	62

I found the directory to be not quite complete. Countries not listed at all but in which I found at least one psychologist were Liberia, Ethiopia, and Southern Rhodesia. Even in the countries listed, new psychologists had since arrived and others had departed. I did not visit much of northern Africa on this trip, so there is nothing I can say about psychologists or industrial psychology in Algeria, Morocco, Tunisia, and Libya.

One might think that in an area like Africa, where professionals are generally so few in number, they would mostly know each other. If this were true, one should be able to locate industrial psychologists very easily merely by getting in touch with the psychology department at the local university. But then one finds that there are as yet almost no psychology departments in the about 33 African colleges and universities, except in the Union of South Africa and in Egypt. The most likely spot to find psychologists in British tradition areas is in the institutes of education. An institute of education is a British administrative device to provide an organization in the university which will be responsible for training teachers. After a student has graduated in a substantive academic discipline, he may take an additional year in the institute of education to qualify as a teacher. These institutes in some cases are dynamic centers of research on psychological as well as educational matters, and also get themselves involved in industrial psychology. Hence they were well worth my looking into as I went around in British and formerly British Africa.

Beyond the universities, industry itself is a likely place to find industrial psychology in action, although in fact I had little time to follow this sort of lead. Nevertheless, just a few words about African industry will help in understanding the potential for industrial psychology in Africa. Industry is most highly developed in South Africa, which has its own steel and coal complex as well as its better known and well developed gold and diamond mines. Mining is important not only in South Africa but in many other parts of Africa as well: copper in Northern Rhodesia and Belgian Congo; tin in Nigeria; diamonds in Belgian Congo, Tanganyika, Sierra Leone, and Liberia; aluminum in Ghana and Guinea; iron ore in Liberia; a variety of metals in Egypt; etc. Oil is becoming important in such countries as Angola and Nigeria. Extractive agricultural production of such items as rubber, cacao, coffee, palm oil, peanuts, tobacco, sisal, and cotton is increasing. Factories to make such products as textiles are already in operation, and more are being built. The water power potential of Africa is said to be as great as that of Europe and both Americas combined, and many of the water power sites are at relatively accessible locations near the coasts. One such site on the lower Congo is said to have the potential to produce as much power as is used at the present time in all of

western Europe and at the cheapest rate of any large installation in the world (Keith, 1958). Labor, though the level of education is low and tribal-type attitudes are still widespread, shows promise of being more adaptable and more free from proud but unprogressive tradition than that of Asia. The long term possibilities for industrialization and industrial psychology would appear to be enormous. As a burgeoning Africa becomes too big a problem for the metropole countries to handle, there may be room for some Americans to assist Africans in developing Africa for Africans.

CENTERS OF INDUSTRIAL PSYCHOLOGY

Union of South Africa

Slightly under a third, or about 40 of the 127 psychologists in the Union, as listed in the *International Directory of Psychologists* are industrial psychologists. The directory shows that these industrial psychologists are engaged in activities not too different from their colleagues in the "other USA." Some work directly for industrial concerns, especially mining companies, while others manage or work in consulting organizations. Still others are employed by government or teach in the universities.

By far the largest single operation in industrial psychology is the National Institute for Personnel Research (NIPR), with headquarters in Johannesburg on the campus of the University of the Witwatersrand and branch offices in other locations (Worthington, 1958). A recent report (Biesheuvel, undated) indicates that NIPR has a staff of 110 persons of whom 61 are graduates in psychology, sociology, social anthropology, mathematical statistics, education, or medicine. Eleven Africans are employed on scientific and technical work. Eight of these have degrees or diplomas in social science and publish reports of their work in professional journals: for example, Mkele (1955) and Hudson, Mokoatle, and Mbau (1958).

NIPR is about two-thirds supported by the South African government and about one-third by consulting and industrial fees. It does a good deal of basic research as well as applied work, so that government subsidy makes good sense. It takes seriously its opportunity to try to test the universality of psychological "laws" developed in western European culture to the readily available nonwestern European cultures.

The Director of NIPR, S. Biesheuvel, is internationally known. Currently he publishes a good deal in the *Journal of Social Psychology* (1958a, 1958b). Some readers may recall having met him during World War II when he studied aviation psychology in the United States with the Army Air Forces Aviation Psychology Program. Subsequently, he set up an aviation psychology program for the South African Air Force.

He and NIPR have widespread influence in industrial psychology throughout much of Africa. For one thing, geography helps: members of NIPR can readily make stops at various places in the rest of Africa on their way to and from professional meetings in Europe (Hudson, 1955). A specific example of NIPR influence in the rest of Africa is shown by their efforts to develop a battery of tests especially adapted for Africans not only in the Union but all over Africa south of the Sahara (Biesheuvel, undated, 1952, 1954). On the research side such a battery would simplify comparative studies. On the practical side, if the tests in the battery could be shown to be rather generally applicable to Africans, it might not be necessary for each African territory and industry to put scarce resources into expensive test development and possibly unnecessary duplication of effort.

These efforts to coordinate testing in Africa are being subsidized at least in part by the Commission for Technical Cooperation in Africa South of the Sahara (CCTA) (Biesheuvel, undated; Scientific Council for Africa South of the Sahara, 1958). This organization, founded in 1950, now includes as members the metropole countries of France, Great Britain, Portugal, and Belgium, as well as such African countries as Liberia, Ghana, the Federation of the Rhodesias and Nyasaland, and the Union. The Scientific Council (CSA), which is associated with CCTA, was established the same year "to further the application of science to the solution of African problems." The United States, through the International Cooperation Administration, has become increasingly interested in CCTA and CSA.

Through CCTA, CSA, and other auspices, some of the South African tests have been tried out in Northern Rhodesia by the Copperbelt mines, in Uganda, and in various countries in western Africa including Ghana and Liberia. The Kenya government is using the tests for vocational school selection, and they are being similarly used at the artisan training colleges in Tanganyika and the Sudan. Recently Biesheuvel took his test battery to Australia, where there is interest in trying out the tests on Papuans. However, I was told from time to time that the tests have not always been found as universally applicable all over Africa as might have been hoped for. Some evidence on this point is mentioned in connection with the discussion below of industrial psychology in Liberia.

A simplified description of the internal structure of NIPR will provide a quick summary of the service and research it performs. The details of the internal structure vary in the two accounts of NIPR available to me (Biesheuvel, undated; South African Council for Scientific and Industrial Research, 1955), and my own observations on my too brief visit there give still other impressions; but the main outlines are clear.

The operations most closely associated with tra-

ditional industrial psychology are: diagnosis of personnel problems and recommendations of what to do about them, personnel selection, personnel training, and ergonomics. The latter is mainly concerned with such expected problems as environmental effects on work performance, man-machine relations, accidents, and fatigue. Techniques like merit rating (Biesheuvel, 1958a), job evaluation (Hudson & Murray, 1958), and time and motion study have also been worked on. Biesheuvel told me of doing selection testing not only with workers in mines but also with production line employees in a motor assembly plant, both operating and workshop personnel in a public bus company, and employees in the building industry. Work has also been done with the military, public service employees, and iron and steel workers.

The more theoretical operations (and to some extent these are service operations for the more traditional industrial psychology operations listed above) are: psychometrics, which concerns itself with basic psychometric research (especially scaling) as well as test construction; mathematical statistics, which develops new analytic techniques but which also may advise and make available its computation facilities to the other parts of NIPR when they have statistical analysis problems; theoretical psychology, which studies basic abilities and personality problems and uses psychophysiological (e.g., EEG) (Mundy-Castle, McKiever, & Prinsloo, 1953), as well as other techniques; and social psychology, which makes studies in group relations, industrial sociology, and demography. Both the theoretical and the social psychology groups do special work on African abilities, personality development, attitudes, motivation, and cultures. The Carnegie Corporation of New York has provided a mobile psychological laboratory in a trailer to make field studies with Africans feasible. Much use has been made of this laboratory trailer in the past several years.

NIPR also has been publishing its own journal, the *Journal of the National Institute for Personnel Research*, since about 1949.

One of the more fascinating aspects of NIPR's work has been in projective testing (called "projection" testing in the Union). Sentence completion, open-ended questions, and TAT-type pictures have all been more or less successfully used and to some extent rather ingeniously validated (Biesheuvel, 1958a; Hudson, 1958).

Biesheuvel mentioned to me some of the difficulties in using pictures as stimuli in projective testing. For example, one picture, designed to evoke African attitudes toward industrialization, portrayed an African in the foreground shaking his fist at what to Europeans is obviously a factory building in the distant background. Smoke is rising from the factory smokestack. It so happens that the African's fist is almost touching the smoke. Some Africans, neglecting the principles

of perspective which we so take for granted, saw the African in the foreground as a giant who was trying to hold up the smoke coming from a tiny house. Of course the picture was not very useful for finding out how some Africans felt about industrialization.

Several Americans have recently become rather involved in the challenging problems of understanding perceptions of Africans (Allport & Pettigrew, 1957; Munger, 1954; Slack, 1959). A group of anthropologists at Northwestern University is also studying these problems (Herskovits, Campbell, & Segall, 1956).

So much for just a glimpse of the well developed and extensive program of industrial psychology, especially that part of it conducted by NIPR in the Union of South Africa. Reference to the *International Directory of Psychologists* will provide more details on psychology in the Union. The remaining centers of activity in industrial psychology in Africa are much smaller and their programs less extensive.

Ghana

The small group of Britishers who just a few years back organized the Institute of Education at the University College of the Gold Coast (now Ghana) were unusually research and test minded. One notable research emphasis was to get the facts concerning the kind of education the African child needed for life in Africa. (It has only happened within the last two or three years, I was told by several responsible persons independently, that African children, in studying geography, were no longer required to memorize such irrelevant-for-Africans facts as the names of all the brooks in England in order to pass an important section of their standard school examinations.) Of the original group of Britishers at the institute only one, Andrew Taylor, is left; but he is surrounding himself with a new group of young, enthusiastic disciples.

Developed early in the program were clerical tests for school use (Taylor, undated-a). About the same time came the opportunity to try out these and other tests on personnel of the Royal West African Frontier Guards, in Sierra Leone and Nigeria, as well as what was then the Gold Coast. The tests proved useful in the military situation, and the institute was permitted access to the test scores. In this way norms on young west African adult males were made generally available. Then requests came into the institute from industry, especially oil companies with operations in both Ghana and Nigeria, for example, Shell/British Petroleum. Not only the clerical tests (Taylor, undated-b) but apparatus tests developed by Biesheuvel's NIPR, e.g., the tripod assembly test, were utilized.

Several results and practices of this west African experience with tests will be of interest to American industrial psychologists. Validity coefficients turn out to be unusually high. It is common to get multiple

Rs in the '70's, with a battery of three or four group administered performance tests, against as fuzzy a criterion as membership in the skilled, semiskilled, or unskilled groups of already employed Africans. For an example, see Taylor's report (1958, unnumbered summary page). The reason is clear: there is so much heterogeneity. At any rate, Africa is the place to go if you feel depressed about low validity coefficients and need a lift.

The field conditions under which the tests are administered has meant instituting "statistical quality control" methods for the testing. The performance tests are administered to groups of six by trained, but not highly educated, African examiners. In order to make sure that test administration conditions remain reasonably constant, the mean scores for each group of six, in strict chronological order, are entered on one simple "quality control" chart, and the high and low score for each group on another chart. The charts are constructed with five parallel lines: the upper action line, the upper warning line, the mean line, the lower warning line, and the lower action line. These lines are so placed that with respect to means, for example, 1 in 1,000 groups would be expected to be above the upper action line, 1 in 40 groups above the upper warning line, 19 in 40 groups between the mean and upper warning line, 19 in 40 groups between the mean and lower warning line, 1 in 40 groups below the lower warning line, and 1 in 1,000 groups below the lower action line. A similar arrangement is prepared for the ranges. An inspector or supervisor at least once daily checks the charts for: whether there are any points outside the action line, whether there are more than two points between the action and warning lines, whether there is a definite time trend, whether there is a preponderance of points on one side of the mean line. A check list of things that might go wrong is provided, as well as simple instructions that tell how to correct for each trouble (Taylor, 1958, pp. 32-34). With this kind of arrangement, testing can be successfully carried on by nonpsychologists at remote mine locations.

All tests are given in English, since this is the one common language the workers will have to know. Leaderless group tests, as in the Union, are being used with apparent success for foreman selection. African reaction to tests is good. Observations indicate that examinees seem neither bored nor frustrated; and, as was noted early in this article, they are impressed by the fairness of testing.

Curiously enough, the main purpose underlying the institute's industrial testing program is to earn money to pay for the African child development study project.

I was told that there might be room for an interested and capable American or two to lend a hand in the further development of the industrial psychology pro-

gram there. Additional research is badly needed. The way has been opened up, and at least several companies have tasted some of the benefits of industrial psychology.

In Ghana, there are several other developments of interest to industrial psychology. The Mobil Oil Company, Ltd., with the guidance of the Harvard University School of Business Administration, has provided, for a five-year period, as an independence gift to Ghana, the first chair of business administration at the University College of Ghana (United States Department of State, 1959, p. 24). The American there has been introducing the case study method. This has meant his going out to business and industry to collect cases, and in addition he has invited business leaders and other visitors, including me, to address his classes. His efforts are doing a good deal to establish a favorable climate for the application of social science and modern administrative methods to business and industry.

It might be added that the Kingsway department store chain, which has outlets in "British" West Africa generally and is, I have been told, a subsidiary of the huge United Africa Company, has been very successfully using tests as one of their personnel procedures.

Nigeria

In this important country, the largest country with respect to population in Africa and to be independent in 1960, there are some initial stirrings of industrial psychology. At the University College at Ibadan (a little known city but probably the largest city in Africa between Cairo and Johannesburg and the largest African Negro city in the world) in the Institute of Education, there are persons who have begun to take over from Taylor, of the University College of Ghana, the Nigerian testing in which Taylor was initially involved. This includes the tin mines at Jos in the Northern Region and the new oil fields along the coast in the Eastern Region of the country.

Federation of the Rhodesias and Nyasaland

Outside of the testing at the copper mines of Northern Rhodesia, there has been little or no industrial psychology in this area. There is a psychologist at the new University College in Salisbury, Southern Rhodesia, but he tends to be an attitudes measurement man with most interest in political and social attitude questions rather than in industrial psychology. What with the rapid industrialization of the Rhodesias, the remarkable building up of the cities, and the influx of white settlers, it was surprising to me to be able to find so little industrial psychology. There is certainly enough of it across the border in the Union, and so many accepted practices there seem to have a tendency to become adopted in the federation.

Other "British Influence" Areas

In such countries as Kenya, Uganda, and Sierra Leone there are at least trade testing centers: government offices to administer tests to determine which skilled workmen are at apprentice level, full tradesman level, etc. However, industrial psychologists have little or nothing to do with this testing, as far as I could find out with my limited time. The Delgado Central Trades School of New Orleans, Louisiana, has a technical assistance contract with the Kampala Technical Institute, Kampala, Uganda. The American expense of this contract is financed by the International Cooperation Administration. The Delgado program has had some influence in introducing American trade training methods in Uganda. Some of their students have done unusually well on the tests given at the trade testing center. One of the Delgado team members, who has a Purdue MA with at least some industrial psychology as part of his academic work, constructed a 100-item surface development test. He administered this to his students in mechanical drawing at the beginning and again at the end of about a six months' course. Results showed that these Africans could be taught to think in terms of three dimensions and geometrical figures and straight lines.

Doob's work (1957a, 1957b, 1957-58) on using different test items as well as doing other psychological research work in African nonliterate societies (for the most part in various sections of "British" Africa) deserves mention for the implications his work could have for industrial psychology.

Liberia

In Liberia one sees many things that remind him of the United States. One of these is the little American world that the Firestone Tire and Rubber Company has carved out in the Liberian rain forest. There, a few more than 100 Americans work with upwards of 20,000 Liberians. Liberians are now working into the central staff. Numbers of Liberians have for many years now been filling positions as foremen and technical factory operatives. The personnel system, including rather complete records, has been well developed over the years. The education director, who works closely with the personnel organization, is in charge of the schools on the plantation concession (the Liberian government provides the teachers who are then assigned to the various schools by the Firestone organization), testing, and internal "public relations."

In the kind of operation that Firestone runs in Liberia, educational and personnel testing are closely coordinated by necessity. An African often becomes eligible for a higher job when he completes satisfactorily certain educational requirements as determined by test results. Education includes both night and day schools.

The educational and personnel activities become strongly intertwined on this plantation. In fact, any distinction there might be between personnel and educational tests breaks down in this kind of situation—a separate collection of tests and test batteries has had to be developed to fit this "Firestone culture." Attempts have been made to use American tests and NIPR tests from South Africa. Some of these are satisfactory, but mostly they do not seem very appropriate to the Firestone culture, I was told. Also, contrary to the situation in South Africa and "British" West Africa where Africans show relatively little hesitation about taking tests, the Firestone people reported to me that the Liberians they work with are very sensitive and are not yet used to being tested. They may not perform up to the full level of their capacity if outsiders are observing them, the Firestone people insisted.

One Firestone practice reminded me of an experience in the World War II Aviation Psychology Program in the United States. During humid weather we used to have to dry out IBM answer sheets in a Guilford, electric bulb heated, dry box before putting them through the test scoring machine. The Firestone plantation has to keep their typewriters, used both for training and testing, in a similar but much larger electric bulb heated, dry box. The excessive moisture in the air would soon ruin the typewriters if they were not cared for in this or some similar way.

In the Liberian government's Ministry of Education, American trained testers have made a good start. Their activities should help to create a climate for more systematic personnel procedures. However, as has been true in other less developed areas of the world, the morality behind keeping scoring keys confidential has been difficult to build into some people. The cultural factors underlying this phenomenon deserve more exploration.

The Prairie View A. and M. College (a part of the Texas A. and M. system) team, like that of Delgado in Uganda, is operating a technical assistance program with the Booker Washington Institute in Kakata, Liberia. The American expense is being taken care of by the International Cooperation Administration. In their attempts to get their technical school graduates well placed, they have, American-style, called together representatives of Liberian business and industry to talk over the problems involved. Reports are that they have succeeded in placing every graduate this last year. Earlier it looked as though they would have great difficulty in placing even a small percentage of them. These activities have tended to make Liberian business and industry more personnel minded, in an organized, planned way. Here again is a way a climate for industrial psychology may be in the process of formation.

"French" Africa

Since I had relatively little purpose in spending much time in the "French" parts of Africa (there has been little American university activity there), I did not get as familiar with industrial psychology in that part of Africa as I did elsewhere. My impressions are that the kinds of activities Americans usually consider industrial psychology are almost altogether done by the government under either vocational guidance or anthropological organizations.

For example, in Cameroun the one psychologist there, Stoerckel, with the assistance of a small staff of Africans he has trained, offers psychological services to all branches of the government. He started in 1946 with the Ministry of Education, where he did vocational guidance, counseling, and testing in the schools. This led to working with the Ministry of Labor where he systematized the testing of apprentices and other levels of tradesmen. Now he is working into traffic accident problems—which are serious even in the, to us, remote Cameroun—and also into motion and time study. His philosophy is to do what he can to minimize human wastage. His African replacement is still in training in France.

In his experience an African can learn anything, from the perceptual habits he needs to take Western-style TATs to more efficient habits of shoveling building materials like sand. But the African must begin this training before he reaches three years of age, according to Stoerckel. When I was in Cameroun, Stoerckel told me that he had not yet had any contact with Biesheuvel in the Union, but he expected to establish this contact through the CCTA.

In Ivory Coast the government anthropologists were studying the human relations problems that result when Africans of various tribal backgrounds come together to work on the expanding tree crop plantations. Problems here were similar to those in African mining areas where large groups of culturally and linguistically widely varying African workers are brought together. Elsewhere, Africans in training to become government officials were being exposed to analyses of social structure—especially those of the societies with which they were eventually expected to work—as well as to methods of applying this kind of knowledge to their future operations. It would be interesting to try to validate this training.

Belgian Congo

To some extent, the Belgians seem to be following a French pattern. Some of the same tests seem to have been used with Africans (Ombredane, 1956a, 1956b, 1957; Ombredane, Robaye, & Plumail, 1956). The Minnesota Spatial Relations Test was used in one study (Ombredane, 1956c).

Other African Countries

I could not find much evidence of anything approaching industrial psychology in other African countries. In the Sudan there was interest, when I was there, in bringing in the first psychologist of any kind to teach at the University of Khartoum. In Ethiopia the Americans on the International Cooperation Administration's technical assistance team in education (including Edith Lord) were using tests as a means of surveying the degree of education in various parts of Ethiopia in order better to understand the educational problems of the country. In Egypt the army had at least one psychologist. In Portuguese Africa there was no organized psychology, as far as I could find out.

CONCLUSIONS

The development of industrial psychology in the various parts of Africa has generally followed closely upon the development of the educational system and of industry. Where education and industry were well along, so usually was industrial psychology. Industrial psychology, especially in "British" areas, was often closely tied in with education and educational testing. Perhaps this close association with education has led to an unusual emphasis on selection testing as compared to other techniques of industrial psychology.

The fairness inherent in selection testing has human relations implications which may lead to the further involvement of industrial psychology in the whole human relations area in rapidly developing African industry. However, anthropologists and sociologists appear to have the inside track in this area at the present time, with the exception of South Africa (Biesheuvel, 1957, 1958a).

So often in other parts of the world the successful handling by psychologists of selection problems has unobtrusively led to their involvement in training problems, which in Africa are enormous, complex, and challenging. One may hope for a similar development in Africa, where much help on training is needed as increasing numbers of Africans take over more complex tasks.

The applications of the techniques of psychology and of industrial psychology to the problems of Africa will not always be easy. Even testing, as successful as it has already often proved to be, has encountered some difficult cross cultural problems, as is evidenced by the inappropriateness of picture projective tests for many Africans. Nevertheless, projective techniques have already been used with some success for getting at attitudes of Africans, and more and more use is likely to be made of such devices.

NIPR and the other pioneer industrial psychologists in Africa have made a good beginning. Their experiences in, for example, applying quality control methods

to psychological testing may help point the way for other industrial psychologists who will follow them in working in the developing countries of the world. The high validity for selection batteries that they have obtained are of general interest in industrial psychology.

In time, a great deal more use could be made of industrial psychology in Africa. The needs are obvious. Considering the rate of other developments in that continent, the time may not be too far off.

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Psychology in the News

Under "Medicine," in Time . . .

As it must, eventually, to all psychologists, *Time* magazine came recently to Herman Feifel, Editor of a new book *The Meaning of Death*. "Concern about death," says Feifel, at the University of Southern California, "has been relegated to the tabooed territory heretofore occupied by diseases like tuberculosis and cancer, and the topic of sex." In the book 21 authorities approach the topic of death from viewpoints of the arts, sciences, and religion. In it Gardner Murphy points out: "The effort to escape the facing of death may constitute a deep source of ill health." *Time* concludes that "far from being gloomy, it is a hopeful work designed to promote mental health through a better understanding and acceptance of death's inevitability."

Calling Dr. Doppelganger! . . .

TWINS, ANYBODY? Close to 350 members of the APA are or were twins and at least that many more are parents of twins, it is estimated by Amram Scheinfeld, an APA member widely known for his books on genetics. He is currently at work on a book about twins: "genetic, developmental, psychological, social and pathological aspects of twins and twinning."

Since special attention will be given by him to the psychology of twins, he would like very much to hear from APA members who might throw light on a number of twin questions. Scheinfeld has found much concern on two points: Should twins be separated or kept together in school? And, are twins more likely to be maladjusted than singletons? Views and experiences of psychologists who are or have twins would be particularly welcomed by Scheinfeld.

Only a twin knows that even then you cannot feel you are in two places at once. (This note is written by half of a pair of twins. The other half makes far worse puns: for example, the other twin authored the line that "one wallow does not make a slummer.")

Not in, Not out . . .

Look magazine for January 2 devoted some 26 pages to "Psychiatry: The Troubled Science" and provided quite a sympathetic account of what the

article persistently referred to as help from "physicians, psychiatrists and psychoanalysts." From time to time, however, the article referred to psychologists, and even ran photographs of some, but without naming the persons shown. The article, by Roland Berg their well known "medical editor," even furnished a glossary, headed "Jargon of Psychiatry," which attempted to define "acting out" and other phrases and described "psychoanalyst" as follows:

a psychiatrist who has continued his training for several years more at a psychoanalytic institute. He himself must also go through analysis. There are some "lay" analysts who are neither M.D.'s nor psychiatrists, but who have had psychoanalytic training.

The words psychology or psychologist are not defined; although these words appear in *Look* magazine, they are apparently not in the "jargon of psychiatry": and that seems to sum up our position today.

A Thank towards Think . . .

We naturally do not wish to advertise a private corporation; we will merely mention its initials, which are IBM. In a recent advertisement this corporation asked in a bold headline: HOW DO YOU MEASURE QUALITY? The subhead answered: "With microphones and mirrors . . . in thousandths of an inch and millionths of a second . . . with psychologists and engineers and artists."

The copy went on to describe design and testing of typewriters with such things as high speed cameras which take 4,000 photographs a second. Later it stated:

To please the secretaries who will type the letters, it takes psychologists. When engineers discovered that the typewriter worked better when each key was depressed fifty thousandths of an inch deeper than was originally planned, psychologists were used to test whether secretaries could tell the difference (they couldn't).

Let us think twice before making any more jokes about this international business machine manufacturer who speaks so nicely about us.

Grinding an Axiom . . .

SEX QUESTIONNAIRE OF PSYCHOLOGISTS IS ATTACKED said the headlines in the New York tabloids a while back, and it seemed there was some scuffling

going on in East Paterson, New Jersey, over a checklist used on Memorial High School's freshmen. It took only a few days for the head of the PTA to declare she saw no wrong in the test, and it has taken this department some weeks of writing different places to find out that they were talking about the Mooney checklist. Of 300 questions, some 10 might be interpreted as having anything to do with sex. And it seems that one irate parent had objected on religious principles, but the press had amplified this in about the same way a lighted cigar in the upholstery of a delegate's car becomes FIRE AT UNITED NATIONS—at least it blazes in the late afternoon editions. One of the great axioms of communication remains: wait for the morning papers.

Blue and Pink Pills . . .

Mike Gorman, Executive Director of the National Committee against Mental Illness, made a hard hitting attack on the pharmaceutical industry when he testified before the Senate Monopoly and Anti-trust Committee. He charged that thousands of ex-mental-patients were suffering because of the high cost of tranquilizers at the corner drugstore. Gorman said the drug companies "can keep the prices as high as the traffic will bear, and I submit they do."

Then he took off on the subject of pharmaceutical advertising, which he described as "nauseating two-page drug color ads which fill every medical journal in the country." He said in these ads:

one day you are shaky and jittery, and the next day you are calm and happy, floating around in a sailboat on a beautiful blue lake (the lake is very blue, and it costs a lot of extra advertising money).

As for the \$100,000,000.00 which the drug industry is said to spend on research, Gorman said much of that money goes into searches such as "whether people like blue or pink pills."

Towards Dr. Teacher's Skinning Machine . . .

In the classroom and the clinic, psychologists are always citing Sophocles, Dostoevsky, or Tennessee Williams, as if writing were really a wing of psychology, abnormal or normal, applied or misapplied. On the other hand, a friend of ours retorts stingingly that a good deal of psychology is properly

considered a branch of literature; and in some fields, such as depth interviews, it really is a far out form of journalism, like.

This latter fellow will turn pale beneath his Mantan when he hears what is being contemplated in teaching (or learning) machines, programed textbooks, and that sort of thing. An enthusiast of these in the daytime is working on a course in creative writing to be taught via programs, and at night he dreams that some day one surely should be able to surround a human being with such inputs and exercises that one could produce at will a Saroyan (red cards and trumpets and banjos on tape?) or a James Gould Cozzens (crisp blue cards, we presume).

Meanwhile, far out on the West Coast (which of course considers Brooklyn to be far out, far out) at the University of Southern California was recently produced a play by Terence Ratigan. The scholarly producers revised it according to psychoanalytical counsel. Two versions were shown to different audiences which filled out questionnaires—the audience was also put on audio tape and photographed by infrared. A note says the tape "preserved the applause and other noises" made by the viewers. As *Science Newsletter* puts it: "the psychoanalyst who took the play as a patient was Dr. Barnet Sharrin of Beverly Hills," and the data were processed by Jit L. Kapur, a graduate student. It makes this department wish for a multiple feedback to record the "noises" made by various cousins in psychology as they read these lines in this family paper.

It is with a sincere plea for tolerance that we recall the old saw about our granduncles, the Jameses, William and Henry, who for all time showed our tribes how to write novelistic psychology and psychological novels. The next generation will always be better able to judge what is science and what is fiction—and of these, which has the most truth and the most fantasy; and of *those*, which is most useful, or beautiful, or most X or Y or Z to the human race. Time will tell whether the teaching machine is to become an indispensable aid to gathering and transmitting information, along with movable type, the mimeograph, the transistor, and the rubber band.

—MICHAEL AMRINE

Psychology in the States

The Science o' It

When the deadline for this monthly column approaches, we must confess to feeling good every time its file contains material that reminds us that this profession is, after all, a science. This, happily, is the case as we begin to put this edition to bed. Here are some of the things we find.

Psychologists Are Scientists Too. So insists the title of a special feature prepared by the Committee on Communication with High School Teachers, printed and distributed gratis through the good offices of Wesleyan University. The reader is free to place his own interpretation on whether the word "too" in the title represents pride, defensiveness, or insistence on constitutional rights. The fact remains that the piece presents 12 typical areas in which psychologists do research, areas touching as much on learning theory as on counseling. If your teenagers have brought home the particular edition of *Current Science* from their junior or high school classes, you will have noted also that it contains an introduction by Leonard Carmichael.

The frank hope is that students in search of a career will waken to the realization that, while physics is indeed a science, psychology is no less so. At least one state association has already requested additional copies "in lots of 500 and 1,000." We choose to consider this a good omen.

National Science Fair. When comely Barbara Neal made her debut at the Cincinnati convention of APA, the aforementioned thought became father to the deed. Having won third prize in the tenth National Science Fair with a nice bit of psychological research, she confirmed the feeling of the Board of Scientific Affairs that APA owes it to itself to cooperate with the program of science fairs and related activities sponsored by Science Clubs of America.

At the behest of BSA, the Board of Professional Affairs has undertaken to promote active participation in the fairs by state psychological associations. Presidents of the latter have recently received from the APA Central Office packets of material which will help pave the way for such involvement. If more Barbara Neals should come to light as a

result, we suspect the APA Treasurer would happily loosen purse strings to allow each of them to be guests of honor at future conventions.

Board of Scientific Affairs. Judging from the above, it is sometimes hard to tell where BSA ends and BPA begins, and vice versa. We have not yet heard either spoken of as "ancillary"—a negatively valent term. But it seems safe to say that neither board feels a need to guard prerogatives and that both seem unusually willing to enlist each other's aid as consultants.

Examples come readily to mind. When ethical issues involve the use and misuse of psychological tests, BPA takes comfort from the fact that the BSA Committee on Psychological Tests is readily at hand. When the BPA Committee on Scientific and Professional Responsibility devotes attention to the manner in which research programs get administered, it hopes to profit from the wisdom of BSA. Conversely, BSA for its part has already offered to assist state associations with the problems involved in arranging program meetings. Were someone to mention Alphonse and Gaston at this stage, the reference might not be amiss.

Junior Academy of Sciences. If the next two items testify to the orientation of the APA Committee on Public Information, the latter is more interested in the hard fact than the soft sell. Its Chairman, Irwin A. Berg, urges first that state associations be made aware of a project supported by grants from the National Science Foundation. The Louisiana Academy of Science, for example, received an NSF grant to provide speakers to interest high school students in careers in science. Five psychologists managed to make themselves available for the purpose. The opportunity, suggests Chairman Berg, is one which state associations elsewhere will not want to let slip by. They will want to know too, he suggests, that the recently founded *Journal of Student Research* (published at Dickinson College, Carlisle, Pennsylvania) attempts to provide an outlet through which students may publish their research efforts.

Reinforcement Theory. Merit, like murder, will out; and the Pennsylvania Psychological Associa-

tion seeks to abet the process (in the case of the former). PPA has recently announced a program of awards and recognition for deserving graduate and undergraduate students of psychology. Stated purpose: to recognize and encourage work which will advance the science of psychology. An Awards and Recognitions Committee will select annually an undergraduate and graduate student for awards of \$50.00, while three others (at least one of whom shall be an undergraduate) will receive Certificates of Merit. Rewards are to be bestowed for two types of accomplishment: outstanding "pre-professional" leadership, research. Both prize winners will be brought to the annual state association meeting, where the former will be duly cited, the latter given an opportunity to read his paper, a summary of which will subsequently appear in the association newsletter.

* * *

Bell Shaped Curve of How We Serve.

Whole theories of education have rested on the premise of learning by doing. State associations are not immune to the principle if one is to judge by their experiences with the forthcoming White House Conference on Children and Youth. What follows is an abbreviated account of some of the things they have learned but not done, or done and learned from.

We have Charles Harvey Miley to thank for data on the kind and extent of state association participation in the planning for the conference; we hold ourselves accountable for the conclusion that participation ranged from minimal to maximal, with most associations falling somewhere in between. As we look at the survey returns from 25 state associations, three degrees of participation are discernible: the guiltily inactive, the moderately active, and the actively active.

The first group of respondents fidgets at having done relatively little in the enterprise. One promises prompt follow-up; another offers to forward the questionnaire to the responsible party; a third professes to have no facts on degree of participation; still another assures the investigator that, though the 1960 conference has received precious little attention, the 1961 Conference on Aging will fare much better.

Associations in the moderately active group offer evidence of good faith in a variety of forms. They have encouraged all members to volunteer, have

furnished the names of knowledgeable psychologists, give assurance that psychologists are participating as individuals if not as members of the state association. It must be said, in all fairness, that, if the involvement has been less than energetic, the tenor of the replies conveys an awareness of responsibility, coupled as it may be with unsureness as to how to proceed. In this group fall the majority of the respondents, so far as we can determine.

Where accomplishments are fairly tangible—and this third group, like the first, is small—it is pointed out in one case that the proportion of psychologists involved in the conference is high as compared with the small number in the state. In another, the state association has approached the problem systematically, assigning a representative to each of the 11 regional groups into which the state is organized.

One might speak, we suppose, of the state associations not yet being tooled up for this kind of venture or of their being somewhat out of phase with the vagaries of planning and scheduling which characterize national conferences of this magnitude. On the other hand, there is assurance that, though the state association influence may be somewhat unsystematically felt on this occasion, the voice of psychology will nevertheless be heard. Psychologists from many quarters will attend the conference, while APA itself has designated Nicholas Hobbs and Marian Radke-Yarrow as its representatives. Other representatives and members of the Central Office staff have served on planning committees, Joseph B. Margolin is filling the position of Coordinator of Conference Studies, and psychologists are writing chapters of several conference publications.

* * *

Psychology and the Attorney General. Opinions issuing from the world of law have a habit of sounding more definitive than most. When they involve psychology, they carry added import. The following have recently come to our attention.

Hypnosis in Montana. In response to a request from the Secretary of the Board of Medical Examiners for an opinion by the Attorney General, the latter held that

the use of hypnosis by a person other than a licensed physician in order to firmly fix a conditioned reflex against the ingestion of candies, other high carbohydrate foods and excessive smoking is a violation of Section 66-1007, Revised Codes of Montana, 1947, prohibiting the practice of medicine without a license.

Subsequently, in response to an inquiry about the opinion, the Attorney General wrote in a letter of October 19, 1959 to Thomas C. Burgess, President of the Montana Psychological Association:

You will note that the opinion deals only with the use of hypnotism for particular purposes by persons of no professional qualifications whatever. It does not apply and was not intended to apply to those persons who use hypnotism as an accepted part of the practice of a recognized profession.

Psychotherapy in Utah. Utah's Attorney General recently issued an official opinion concerning certain aspects of the legislation governing the certification of psychologists. Six of seven questions raised by a divisional director of the Department of Business Regulation related to the meaning of a single sentence in the psychology statute: "Psychologists who work with mentally ill persons shall establish and maintain effective intercommunication with a physician."

A 1958 opinion, rendered at the request of the Executive Secretary of the state medical association, had responded in the affirmative to the question: "Does the practice of medicine as defined in the Utah Code include the practice of psychotherapy?" In the present instance, Question 7 read accordingly: "Does the opinion of the Attorney General's office on psychotherapy apply to psychologists?" The answer, after reference to the previous opinion, was: a study of the definition of the practice of psychology in the psychology statute

reveals a totally different approach to the problem, a psychologist being concerned with motivation, perception, emotional relationships and social adjustments of the patient, while psychotherapy, which has been defined as a part of the practice of medicine, is concerned with the mental treatment of specific functional disorders. One relates to a person's emotional, social adjustment with his surroundings; the other to the mental phase of treatment of a physical or nervous disorder. . . . Therefore, the classification of psychotherapy with the practice of medicine does not affect the practice of the psychologist's profession which is not classed within the practice of medicine.

* * *

Carolina Moon Keep Psi-ning. If the above suggests that the community requires a more panoramic view of the activities which are psychologists', the series of television presentations by members of the South Carolina Psychological Association will help provide it. Under the title

"Psychology in Action," the program is designed to introduce the concepts of modern psychology to the public. The spectrum it covers is portrayed by the titles of the seven programs in the series: "Psychology of Human Relations," "Psychology of Counseling and Guidance," "Industrial Psychology," "Clinical Psychology," "Experimental Psychology," "Research in Clinical Psychology," "Psychology as a Science."

Brotherhood of Man. Following a panel discussion at the Annual Meeting of the New York State Psychological Association on the problems of desegregation, the following resolution was developed, presented to the membership, and thereupon passed:

Because public policy on matters affecting housing is of grave general concern, and because we, the members of the New York State Psychological Association, in annual convention assembled, believe that our training, research, and experiences as psychologists have sensitized us to relevant issues and conclusions, we have adopted the following resolution:

Whereas discriminatory practices in the rental and sale of housing facilities, on the basis of race, creed, or national origin, have direct and indirect detrimental influences upon the formation and functioning of personalities among individuals subjected to such practices, and

Whereas such discriminatory practices have unwholesome effects upon the qualities of interpersonal relationships among residents of our state, and

Whereas the prohibition of such practices will contribute, not only to the welfare of individuals subjected to them, but also to the general good of all residents of our state, and

Whereas legislation and related supportive action against such practices can be effective forms of desirable public education in these matters, and

Whereas the vast majority of the residents of our state, as law-abiding citizens will, at the very least, accept such legislation if it is passed,

Be it therefore resolved that we recommend the passage of a Fair Housing Practices Act for the State of New York, patterned after the Sharkey-Brown-Isaacs Law which has been in effect in the City of New York since April 1, 1958.

Be it further resolved that copies of this resolution be transmitted to the Governor and the Legislature of this State and to the press and other media of public information.

—M. CURTIS LANGHORNE

Chairman

Board of Professional Affairs

ERASMUS L. HOCH

Administrative Officer

State and Professional Affairs

Notes and News

Monte Bliss, of Wheaton College, died on December 7, 1959.

John R. Bowen, of Dallas, Texas, died on November 24, 1959.

Burton M. Castner, of Sacramento, California, died on December 19, 1959.

Clifford P. Froehlich, of Berkeley, California, died on December 29, 1959.

Wilbur S. Hulin, of Eugene, Oregon, died on December 11, 1959.

Helen D. Sargent, of the Menninger Foundation, died on December 25, 1959.

Sherry K. Wood, of Canastota, New York, died on November 12, 1959.

J. Stacy Adams, formerly at Stanford University, has joined the staff of the Behavioral Research Service, General Electric Company, in New York City.

Arthur E. Alper has accepted an appointment as Instructor and Clinical Psychologist in the Department of Psychiatry and Neurology at the Medical College of Georgia.

Solomon E. Asch, of Swarthmore College, is at the Institute for Advanced Study, Princeton, New Jersey, this year.

Corinne Baker has resigned as Chief Psychologist at Cleveland State Hospital.

Walter V. Clarke Associates, Inc. announces the election of **Chester C. Bennett**, of Boston University Graduate School, and **S. I. Hayakawa**, of San Francisco State College, to the Board of Directors.

William H. Brown, formerly at the University of Utah, has become Director of Clinical Services in the recently established Utah Psychological Center.

Recent additions to the Department of Psychiatry at the University of Arkansas Medical Center include:

George Lassen, formerly at the Larue D. Carter Memorial Hospital, as Assistant Professor and Counseling Psychologist

Samuel D. Clements, formerly at the University of Texas Medical Branch, as Assistant Professor and Clinical Child Psychologist

William Coleman is on leave of absence from the System Development Corporation for the current semester to participate as Visiting Lecturer in the National Defense Education Act Institute at the University of Wisconsin.

Personnel additions to the Community Mental Health program in Minnesota include:

Paul A. Hauck, formerly at East Moline State Hospital, is now Psychologist and Program Director at the Western Mental Health Center in Marshall.

Richard G. Stennett, formerly at Ontario Hospital, is Psychologist and Program Director at the Tri-County Mental Health Center in Grand Rapids.

Robert Swanson has been appointed Chief Psychologist at the Duluth Mental Hygiene Clinic, Inc.

John E. Teahan, formerly at Connecticut State Hospital, has joined the Southwestern Mental Health Center in Luverne.

John A. Cunningham, formerly with the Minnesota Department of Public Welfare, is now a Counseling Psychologist in the Veterans Administration Office in Roanoke, Virginia.

Herman Feifel was awarded a special Research Fellowship grant for one year by the National Institute of Mental Health and is spending the year 1960 in the Research Center for Mental Health at New York University.

Eugene L. Gaier has accepted an appointment as Associate Professor of Educational Psychology in the School of Education at the University of Buffalo.

Arthur C. F. Gilbert, formerly at Princeton University, is now Clinical Psychologist in the Mental Hygiene Clinic at the United States Air Force Academy, Colorado.

Stanley C. Grzeda has left North American Aviation, Inc. to join the Systems Research Branch of Bendix Pacific, North Hollywood, California.

F. J. McGuigan will be in Paris for a year beginning February 1, 1960 as faculty adviser to the Hollins Abroad program of Hollins College. **Allen Calvin** will be acting Chairman of the Department

of Psychology. Robert C. Bolles has joined the department as Assistant Professor.

Edward A. Rundquist has joined the System Development Corporation in Santa Monica, California, as Head of the System Training Operations Department, replacing Milton Holmen who is now General Manager of System Training.

Edward L. Holshouser, formerly with the Pittsburgh Group Companies of the Columbia Gas System, has accepted a position as Project Engineer in the Human Factors Section of the Philco Western Development Laboratories in Palo Alto, California.

Wilbur L. Layton, formerly at the University of Minnesota, has joined the faculty of Iowa State University as Professor and Head of the Department of Psychology.

Lawrence W. Littig has been appointed an Assistant Professor in the Psychology Department at the University of Buffalo.

Frederick G. Livingood has retired from Washington College, Maryland, where he was Chairman of the Department of Education and Psychology.

Howard P. Mold, formerly with the Minneapolis Honeywell Regulator Company, has been appointed Executive Vice-President and Director of Marketing for Streater Store Fixtures, Inc., Minnesota.

Norman M. Molesko, formerly associated with the System Development Corporation, has accepted a position as engineering psychologist with Stromberg-Carlson in San Diego, California.

James H. Myers, formerly with the Prudential Insurance Company, is now Assistant Dean of the Undergraduate Programs and Associate Professor of Marketing in the School of Commerce at the University of Southern California.

Three APA members have been appointed Vice-Presidents of National Analysts, Inc., Philadelphia: James A. Bayton, Aaron J. Spector, and Warren J. Wittreich.

Stanley Newman, formerly at the United States Army Medical Center in Zama, Japan, has been appointed Chief Psychologist in the Clifford W. Beers Guidance Clinic, New Haven, Connecticut, and Assistant Professor at Southern Connecticut State College.

In the Department of Psychology at Pennsylvania State University:

George Guthrie is conducting research on mental organization and teaching in the Philippines during the current year on a Fulbright appointment.

John Corso is on sabbatical leave during the spring; John Hall has returned from a fall sabbatical.

The journal *Psychoanalysis and the Psychoanalytic Review* announced that the 1958-59 Clement Staff Award was shared by Helen B. Lewis for her article "Organization of the Self as Reflected in Manifest Dreams" with honorable mention to Reuben Fine for his paper "The Measurement Problem in Psychology." The Emile Durkheim and George Simmel Award was shared by John Sullivan for his article "From Breuer to Freud."

The Editors of *Psychological Reports* and of *Perceptual and Motor Skills* announce the appointment of the following as Associate Editors: Abram Amsel, Richard C. Atkinson, Lyle E. Bourne, Jr., Walter B. Essman, Albert E. Goss, Melvin H. Marx, and George J. Wischner.

The former Department of Psychology in the Graduate School of Education at Yeshiva University has been reorganized and expanded into the Department of Experimental and Clinical Psychology with Irvin Rock as Chairman and the Department of Educational and School Psychology with Hirsch L. Silverman as Chairman.

J. Maurice Rogers, formerly with the San Francisco Juvenile Court, has been appointed Chief Clinical Psychologist in the San Francisco Department of Public Health.

Contributions in memory of Helen D. Sargent may be made to the Helen Sargent Memorial Fund, which has been established by the Menninger Foundation (Topeka, Kansas) to provide continued support for research in which she was interested.

Jack Sawyer is now lecturer and postdoctoral research fellow in quantitative methodology in the Department of Sociology at the University of Chicago.

Richard L. Solomon, of Harvard University, has been appointed Professor in the Department of Psychology at the University of Pennsylvania, beginning in July 1960.

George D. Stoddard has been named Chancellor and Executive Vice-President of New York University.

At Science Research Associates, Inc. in Chicago:

Murray Tondow has been appointed Director of Electronic Data Processing Services.

Marilyn Lee van Goethem has been appointed Assistant Director of the Research and Development Department.

The following personnel changes have occurred in Psychology Services, Department of Medicine and Surgery, Veterans Administration:

Roy C. Calogeras has been appointed to the Clinical Psychology Staff, VA Mental Hygiene Clinic, Newark, New Jersey.

Paul B. Carpenter has resigned from the Psychology Service, VA Center (Gulfport Division), Biloxi, Mississippi.

Donald Gold has been appointed to the Psychology Service, VA Hospital, New York, New York.

H. Elston Hooper has transferred from the Long Beach VA Hospital to the Psychology Service, VA Hospital, Augusta, Georgia.

Robert J. Jones has transferred from the Coatesville VA Hospital to the position of Chief, Psychology Service, VA Hospital, Butler, Pennsylvania.

Henry Kavkewitz has transferred from the East Orange VA Hospital to the position of Chief, Psychology Service, VA Hospital, Brooklyn, New York.

Henry Matty has resigned from the Psychology Service, VA Hospital, Coral Gables, Florida.

Richard C. Miller has resigned from the Psychology Service, VA Hospital (Leech Farm Road), Pittsburgh, Pennsylvania.

George Rhodes has been appointed to the Vocational Counseling Staff, VA Hospital, Long Beach, California.

Robert Romano has resigned from the Psychology Service, VA Hospital (Leech Farm Road), Pittsburgh, Pennsylvania.

Leo Shatin has resigned from the Clinical Psychology Service, VA Hospital, Albany, New York, to accept a position at Seton Hall College of Medicine and Dentistry, Jersey City, New Jersey.

J. Gordon Tolmie has resigned from the Vocational Counseling Staff, VA Hospital, San Fernando, California.

Gilwee Walker, a graduate of the VA Psychology Training Program, University of Washington, has been appointed to the Clinical Psychology Service, Mental Hygiene Clinic, Seattle, Washington.

Herman R. Weiss has transferred from the Brooklyn VA Hospital to the position of Chief, Clinical Psychology Service, VA Mental Hygiene Clinic, New York, New York.

Wayne Wisham has resigned as Chief Clinical Psychologist, VA Hospital, Fresno, California.

Nicholas M. P. Vincent has been appointed Head of the Department of Psychology and Sociology at Jacksonville University.

The Wallin Applied Psychology Prize has been established at Augustana College by **J. E. Wallace Wallin** in memory of his late daughter. The prize is to be awarded each year to the junior or senior at the college who achieves the highest distinction in clinical psychology, educational psychology, special education, or mental hygiene. A collection of Wallin's writings has been founded at the college.

A postdoctoral Fellowship in Clinical Psychology is offered by the **Austen Riggs Center** beginning July 1, 1960. The primary purpose of the fellowship is advanced training in diagnostic test interpretation, but some opportunity for research and supervised therapy will also be available. The patient population includes adults and children, and all varieties of neurotics, character disorders, and certain types of schizophrenics, depressives, and psychopaths. The USPHS stipend for the first year is \$6,000, for the second year \$7,000; \$3,600 of the annual stipend is tax exempt. Those interested should write to: Robert A. Harris; Austen Riggs Center, Inc.; Stockbridge, Massachusetts.

The next deadlines for submitting research proposals to the **Cooperative Research Program** are April 1 and September 1, 1960. For further information, write to: CRP; Office of Education, United States Department of Health, Education, and Welfare; Washington 25, D. C.

The *Department of Child Development and Family Relationships* at **Cornell University** announces five fellowships for students interested in the scientific study of children and families. For further information, write to: Mary Ford; Cornell University; Ithaca, New York.

The **National Science Foundation** announces that the next closing date for receipt of proposals for support of renovation and/or construction of graduate level (doctoral) research laboratories is September 1, 1960. Preliminary inquiry may be made to: *Division of Biological and Medical Sciences*, National Science Foundation; Washington 25, D. C.

The *Division of Psychology* in the Department of Psychiatry at the **University of Rochester Medical Center** offers a postdoctoral program for advanced training in clinical psychology beginning July 1, 1960. The program is open to applicants holding a PhD in psychology from a recognized

university. Stipend for the first year is \$6,000. A second year at \$7,000 may be possible. The program provides the opportunity: to participate jointly with psychiatric residents and social work students in didactic seminars and conferences; to become acquainted with the scope, facilities, and activities of a university hospital, a municipal hospital, and of the Medical School and the School of Nursing; to receive closely supervised, individualized training in phases of clinical psychology activities; to become aware of community outpatient problems and facilities; to observe and participate in the different facets of research activities. Application forms and further information may be obtained by writing to: Norman I. Harway; Division of Psychology, Department of Psychiatry, University of Rochester Medical Center; Rochester 20, New York.

The *Department of Psychiatry at the University of Wisconsin Medical School* is accepting applications for postdoctoral fellowships in clinical psychology which will be available on or before September 1960. Stipend for the one-year appointment is \$6,000. Candidates must have the PhD with major work in clinical psychology; some clinical experience is essential. The training program emphasizes the development of psychotherapeutic skills with adequate opportunity for further experience with diagnostic problems. Inquiries may be addressed to: Norman S. Greenfield; Department of Psychiatry, University Hospitals; Madison 6, Wisconsin.

The Carnegie Foundation has given a grant to Allen Calvin and M. W. Sullivan, of Hollins College, for the development of automated teaching in the area of foreign languages.

The Department of Psychology at the University of Minnesota has established a **Center for Personality Research** to provide a training program for graduate students interested in personality research and theory. NIMH stipends are available for superior students. Interested students may apply for admission and financial support to: Robert D. Wirt, Director; Center for Personality Research, University of Minnesota; Minneapolis 14, Minnesota.

Research projects currently contracted for under the Cooperative Research Program of the

United States Department of Health, Education, and Welfare include:

William F. Battig, University of Virginia, "Analysis of Processes in Paired-Associate Learning"

Jerome Bruner, Harvard University, "The Development of Designs for Curriculum Research"

Raymond B. Cattell, University of Illinois, "Prediction and Understanding of the Effect of Children's Interests on School Performance"

Irvin L. Child, Yale University, "A Study of Esthetic Judgment"

Walter W. Cook, University of Minnesota, "A Study of the Factors Operative in the Selective Retention of Students in Teacher Education. Part II"

Robert F. DeHaan, Hope College, "A Study of Leadership in School Age Children"

Arthur A. Dole, University of Hawaii, "A Study of Values as Determinants of Educational-Vocational Choices in Hawaii"

Mervin B. Freedman, Vassar College, "Measurement and Evaluation of Change in College Women"

Robert Glaser and Lloyd E. Homme, University of Pittsburgh, "Investigations of Variations in the Properties of Self-Tutoring Learning Sequences"

Howard E. Gruber, University of Colorado, "Self-Directed Study: An Experiment in Higher Education at the University of Colorado"

J. P. Guilford, University of Southern California, "Creative Thinking in Children at the Junior High School Level"

J. Thomas Hastings, University of Illinois, "Effects on Use of Tests by Teachers Trained in a Summer Institute"

Harry Levin, Cornell University, "A Basic Research Program on Reading"

Edwin C. Lewis, Iowa State University, "Student-Teacher Interaction as a Determiner of Effective Teaching"

Carson McGuire, University of Texas, "Factors Associated with the Educational Utilization of Human Talent. Part II"

Herschel T. Manuel, University of Texas, "The Preparation and Evaluation of Interlanguage Testing Materials"

William Morse, University of Michigan, "Observational Study of School Classroom Behavior from Diverse Evaluative Frameworks: Developmental, Mental Health, Substantive Learning, and Group Process"

Stephen P. Quigley, Gallaudet College, "An Experimental Investigation of the Effects of Institutionalization on the Psychoeducational Development of Children with Impaired Hearing"

L. M. Stolurow, University of Illinois, "Principles for Programming Learning Materials in Self-Instructional Devices for Mentally Retarded Children"

D. L. Thistlethwaite, Northwestern University, "Factors Influencing the Recruitment and Training of Intellectually Talented Students in Higher Educational Programs"

G. G. Thompson, Ohio State University, "Investigation and Measurement of the Social Values Governing Interpersonal Relations among Adolescent Youth and their Teachers"

E. Paul Torrance, University of Minnesota, "Role of Evaluation in Creative Thinking"

Malcolm R. Westcott, Vassar College, "Inference, Guesswork, and Creativity"

The National Recreation Association's Consulting Service on Recreation for the Ill and the Handicapped has completed the **Coordinated Community Recreation Project** in the institutions of Sussex County, New Jersey. The purpose of the one-year demonstration and study program was to determine the various costs and problems involved in an all-inclusive recreation project for more than 200 of the ill, aged, and handicapped in the county's four nursing homes, one general hospital, and the welfare home. For information on this recreation project, write to: Beatrice H. Hill, Director; Consulting Service on Recreation for the Ill and Handicapped, National Recreation Association; 8 West 8 Street; New York 11, New York.

The National Institute of Mental Health has awarded a grant to Gordon M. Becker, of Boston University, to continue research on human **decision making** in the face of conflicting information and a grant to Walter Weiss for continuation of a research program on "drive states" and **opinion changes**.

Myron Brender, Nathaniel H. Eisen, Richard W. Kilby, and William Wolfson announce completion of plans for the publication of the **Journal of Psychological Research Proposals** (see *Amer. Psychologist*, 1959, 14, 240-241). Inquiries regarding publication policies and requirements should be directed to: Myron Brender; 114 West 86 Street; New York 24, New York.

The Social Science Institute at Washington University has received grants for continuing research programs in the fields of **mental health, adolescent behavior, and social behavior in small groups**. The directors of the several research programs include Richard deCharms, John C. Glidewell, and Edwin P. Hollander.

Texas Christian University, Fort Worth, Texas, will initiate in September 1960 a doctoral program emphasizing **research training** in learning, perception, physiological, psychometric, personality, social, abnormal, and human factors areas. Research fellowships are available up to \$2,400 per year. Inquiries should be addressed to S. B. Sells, Professor of Psychology.

The Department of Sociology at Southern Illinois University will establish a basic research center to study the problem of **what makes people drink**.

The Woods Schools (Langhorne, Pennsylvania) has prepared two new recordings: "Counseling with Parents at Time of First Knowledge of Retardation" and "Helping Parents in a Community Setting." Playing time of each record is approximately 35 minutes. The records (12-inch, double-sided, 33 $\frac{1}{3}$ rpm) may be borrowed for group meetings, discussion conferences, etc.; they are supplied without cost except for shipping charges.

During October-December 1959, the Association for the Improvement of Mental Health conducted a course open to the public on **Education for Marriage**. The course was originated and planned by Herbert M. Schall (105 East 73 Street; New York 21, New York).

The **Mental Health Research Institute** at the University of Michigan dedicated its new building on January 29, 1960. James G. Miller is Director of the institute.

The New York Chapter of the **Society for Projective Techniques** (Fifth Avenue and 100 Street; New York 29, New York) held workshops on the Kahn Test of Symbol Arrangement, January 1960, and on the Bender-Gestalt, February 1960.

The **Institute for Juvenile Research** celebrated its fiftieth anniversary on February 24, 1960 in Chicago, Illinois. The topic of the invited address was: "The Child Guidance Movement in Retrospect and Prospect."

The Annual Meeting of the **National Council on Alcoholism** will be held on March 22-25, 1960 in New York City.

A symposium on "**Theory and Research Methodology in Hypnosis**" will be held at Colgate University on April 1-2, 1960. For further information, write to: G. H. Estabrooks; Colgate University; Hamilton, New York.

A symposium on "**Basic Questions in the Structure of Languages**" will be sponsored by the American Mathematical Society (190 Hope Street; Providence 6, Rhode Island) and the Association for Symbolic Logic in New York City on April 14-16, 1960.

The World Union of Organizations for the Safeguard of Youth will hold its first international congress in Rome on April 19-25, 1960. The theme will be "Teamwork in the Solution of Technical

and Administrative Problems in Programs for Maladapted Children and Youth." For further information, write to: Secretary General, UMOSEA; 28 Place Saint-George; Paris 9, France.

A symposium on "LSD-25 in Psychotherapy" will be held on April 22, 1960 at the Downstate Medical Center in Brooklyn. For further information, write to: Alexander Bassin, Psychological Testing Service; 120 Schermerhorn Street; Brooklyn 1, New York.

The Department of Psychological Foundations and Services, Teachers College, Columbia University, and the New York City Chapter of the Association for the Help of Retarded Children announce a work conference, July 11-22, 1960, on "Rehabilitation of the Adolescent and Adult Mentally Retarded." Information concerning registration, stipends, etc. is available from: Abraham Jacobs; Box 35, Teachers College, Columbia University; New York 27, New York.

The London Conference on the Scientific Study of Mental Deficiency will be held on July 24-29, 1960. For information, write to: Harvey A. Stevens; American Association on Mental Deficiency; P. O. Box 3128; Madison 4, Wisconsin.

The International Union of Family Organizations will hold an International Conference on the Family at Teachers College, Columbia University, August 23-26, 1960. For information concerning registration, write to: V. W. Jewson, Executive Secretary; 1219 University Avenue, S.E.; Minneapolis 14, Minnesota.

The twentieth Annual Meeting of the Society for the Scientific Study of Religion will be held in New York City on October 28-29, 1960. Scholars with empirical studies to report are invited to send five copies of an abstract of not more than 300 words to: Horace M. Kallen; 411 West 114 Street; New York 25, New York.

"A Register of Visiting Scholars in the United States" is prepared by the Committee on International Exchange of Persons, a committee of the Conference Board of Associated Research Councils. The name, institution, country, host institution, duration of visit, and field of specialization of visiting scholars included in the current register are:

Liselotte Arnold, Institute for Social Service and Educational Aid, Germany, Claremont Graduate School, 8/59-11/59, group psychotherapy

Geerds Coddou, University of Concepción, Chile, Stanford University, 9/59-6/60, clinical psychology, child guidance

Rogelio Diaz-Guerrero, National University of Mexico, Mexico University of Texas, 9/59-6/60, psychotherapy, sociocultural and experimental psychology.

Llanos Espinoza, Superior Normal School (Chosica), Peru, University of Chicago, 9/59-6/60, counseling and guidance

Nico Henry Frijda, University of Amsterdam, Netherlands, Harvard University, 9/59-7/60, empathic perception

Hans-Joachim Haase, University of Dusseldorf, Germany, Delaware State Hospital (Farnhurst), 9/59-9/60, psychopharmacology

Tukasa Kobayasi, University of Tokyo, Japan, University of Pittsburgh School of Medicine, 9/59-9/60, psychopharmacology: central nervous system

Nauttam Kothari, Topiwala National Medical College, India, Columbia University College of Physicians and Surgeons, 5/59-5/60, drug evaluation in treatment of mental illness, schizophrenia

Carlo Naldi, Instituto Magistrale (Florence), Italy, Merrill-Palmer School (Detroit), 9/59-6/60, student counseling, vocational guidance, psychotherapy

William M. O'Neil, University of Sydney, Australia, Bowdoin College, 1/60-8/60, historical and theoretical bases of modern psychology, philosophy of science

Mary Joyce Pickersgill, University of Leeds, United Kingdom, Radcliffe College, 9/59-9/60, perceptual defects in neurological and psychiatric patients

Ramirez Pisculich, Superior Normal School (Chosica), Peru, University of Chicago, 9/59-7/60, educational psychology, child guidance

Charles P. Seager, University of Bristol, United Kingdom, State University of Iowa College of Medicine, 7/59-7/60, physiopsychological investigations of psychiatric problems

Hachizo Umezo, University of Tokyo, Japan, Columbia University, 9/59-6/60, symbolic habit formation, education of the deaf and blind

If you are interested in extending to any of these scholars an invitation to lecture, write to him directly in care of the university he is visiting. If you wish additional information about him, write to: Elizabeth P. Lam, Executive Associate; CIEP; 2101 Constitution Avenue, N.W.; Washington 25, D. C.

The Committee on International Exchange of Persons has also prepared a circular giving information on procedures for inviting, through the educational exchange program, foreign nationals to teach or to do research in American universities and colleges. It explains the nature of the benefits available, how foreign scholars apply for such benefits, and how invitations may be issued to them by American universities and colleges.

Convention Calendar

American Psychological Association: September 1-7,
1960; Chicago, Illinois

For information, write to:

Janice P. Fish
American Psychological Association
1333 Sixteenth Street, N.W.
Washington 6, D. C.

Southwestern Psychological Association: March 24-26,
1960; Galveston, Texas

For information, write to:

Beatrice A. Cobb, Secretary
Department of Psychology
Texas Technological College
Lubbock, Texas

Southeastern Psychological Association: March 31-
April 2, 1960; Atlanta, Georgia

For information, write to:

Susan W. Gray
Box 30
George Peabody College for Teachers
Nashville 12, Tennessee

Southern Society for Philosophy and Psychology:
April 14-16, 1960; Biloxi, Mississippi

For information, write to:

Dan R. Kenshalo
Florida State University
Tallahassee, Florida

Eastern Psychological Association: April 15-16, 1960;
New York, New York

For information, write to:

Carl H. Rush
P. O. Box 252
Glenbrook, Connecticut

Western Psychological Association: April 21-23, 1960;
San Jose, California

For information, write to:

Brant Clark
Department of Psychology
San Jose State College
San Jose 14, California

Midwestern Psychological Association: April 28-30,
1960; St. Louis, Missouri

For information, write to:

I. E. Farber, Secretary-Treasurer
Midwestern Psychological Association
Department of Psychology
State University of Iowa
Iowa City, Iowa

Rocky Mountain Psychological Association: May 5-7,
1960; Glenwood Springs, Colorado

For information, write to:

William H. Brown
Department of Psychiatry
University of Utah College of Medicine
156 Westminister Avenue
Salt Lake City 15, Utah

Inter-Society Color Council: April 11-12, 1960; Phila-
delphia, Pennsylvania

For information, write to:

Ralph M. Evans, Secretary
Inter-Society Color Council
Color Technology Division, Building 65
Eastman Kodak Company
Rochester 4, New York

ADVANCED REGISTRATION FORM

SIXTY-EIGHTH ANNUAL CONVENTION OF THE AMERICAN PSYCHOLOGICAL ASSOCIATION

Chicago, Illinois, September 1-7, 1960

Please type or print:

Name: Dr. _____
Mr. _____
Miss _____
Mrs. _____
Last First Middle Initial

Professional Affiliation:
(to appear on badge,
maximum of 20 letters
per line)

(Street Address)

(City)

(State)

The following information is requested for the Convention Directory:

- Expected date of arrival: _____ Departure: _____
- APA membership status:
Fellow _____ Member _____ Associate _____
Member, Student Journal Group _____ Foreign Affiliate _____ Member, Psi Chi _____
- Indicate Division memberships by number(s) _____
There is no registration fee for APA Fellows, Members, Associates, Affiliates, and Members of the Student Journal Group or Psi Chi.
- Nonmember _____

REGISTRATION FROM NONMEMBERS MUST BE ACCOMPANIED BY A REGISTRATION FEE OF \$3.00. MAKE CHECK PAYABLE TO: APA CONVENTION AFFAIRS BOARD.

The following information is requested to help plan special events and related facilities:

- Is your spouse coming to the convention with you? Yes _____ No _____
- Are you bringing any children with you? Yes _____ No _____ If yes, check below:
 - Number in age group:
Under 3 years _____ 3-6 years _____ 6-12 years _____ Over 12 years _____
 - Do you want day nursery child care? Yes _____ No _____

APA DAY, SUNDAY, SEPTEMBER 4

..... I plan to attend the APA Day Buffet Lunch.
..... Please reserve lunch ticket(s) for me at \$3.00 each, including tax and tip.
..... Check for \$..... enclosed for lunches.
..... I do not wish a reservation for lunch.

You may register either at the Sherman or Morrison. Duplicate registration facilities will be set up and maintained throughout the convention.

HOTEL INFORMATION

..... I do not want a hotel reservation

Headquarters will be the Sherman and Morrison Hotels. The following rates will apply in both hotels. Please indicate the hotel and type of accommodations desired:

..... Single bedrooms @ \$ 8.00	\$10.00	\$12.00
..... Double bedrooms @ 11.00	13.00	15.00
..... Twin bedrooms @ 14.00	15.00	16.00
..... Dormitory rooms @ 3.50 per person (This rate applies only for at least four or more in a room. Please list names below.)		

Hotel desired: Sherman Morrison

NOTE: THESE RATES ARE GUARANTEED AT THE RATE REQUESTED IF THE REGISTRATION BLANK IS RETURNED PRIOR TO AUGUST 1, 1960. AFTER AUGUST 1 EVERY EFFORT WILL BE MADE TO ASSIGN ROOMS AT THE RATE REQUESTED, BUT SUCH ASSIGNMENT IS QUITE UNLIKELY, AND CANNOT BE GUARANTEED. IT IS MOST LIKELY THAT RESERVATIONS RECEIVED AFTER AUGUST 1 WILL BE ASSIGNED AT THE MAXIMUM RATE SHOWN HERE.

MEMBERS ARE URGED TO RETURN THIS FORM PROMPTLY, AND IN ANY EVENT PRIOR TO AUGUST 1, IN ORDER TO BE SURE OF RECEIVING THE ACCOMMODATIONS DESIRED.

Note: Reservations will not be held beyond 6:00 P.M. except by request. Your reservation will be confirmed.

Mail Confirmation to: _____
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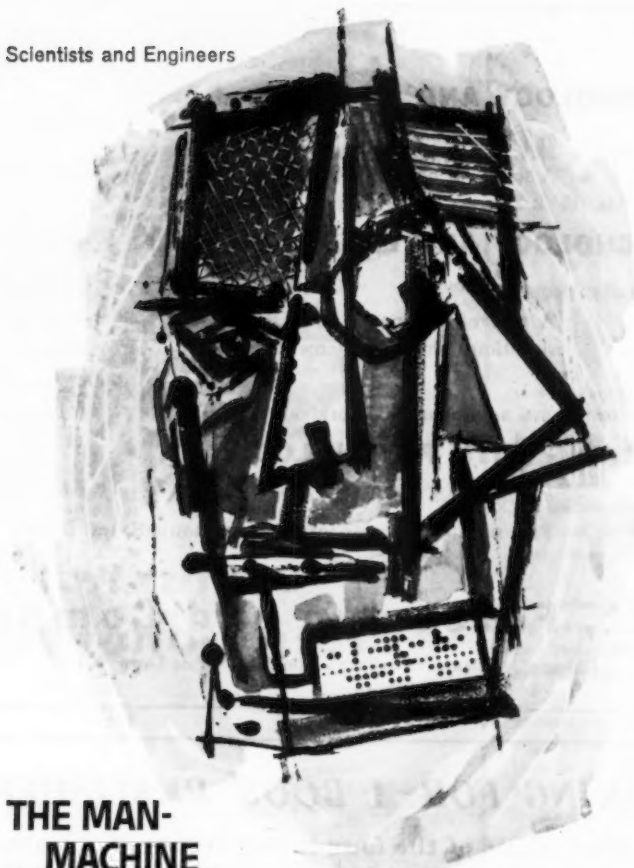
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